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THE SPHERE

Vol. CLXV No. 2154 — WITH WHICH IS INCORPORATED THE GRAPHIC — MAY 3 1941

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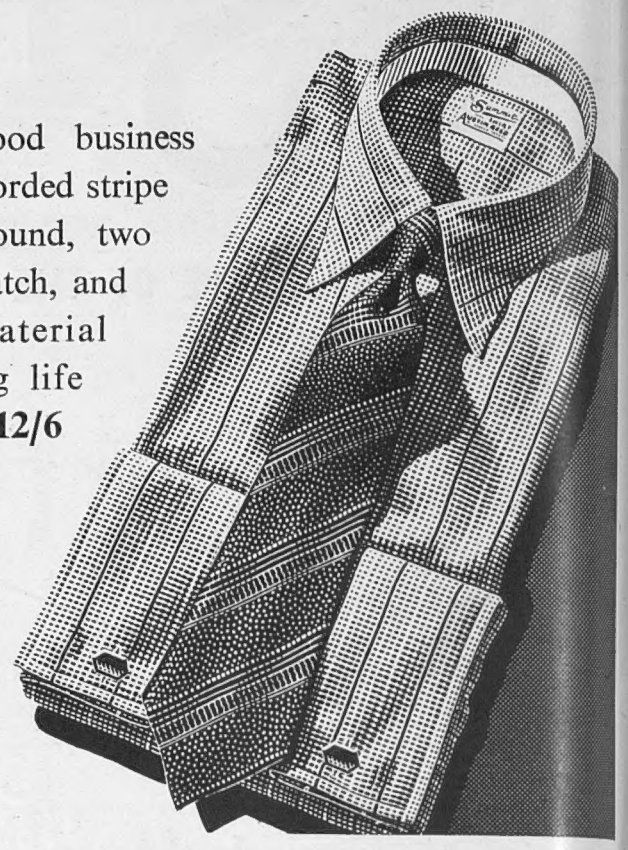

Here's a good business shirt: neat corded stripe on white ground, two collars to match, and a heavy material with a long life before it. **12/6**

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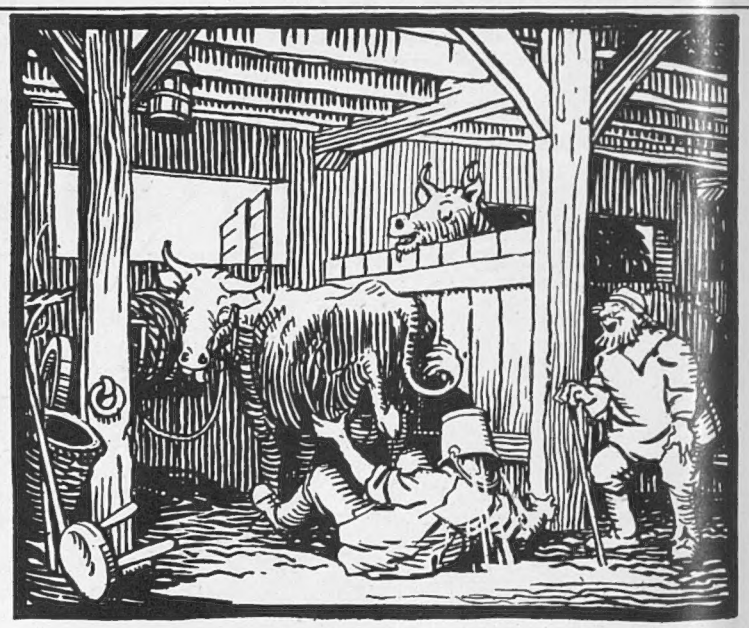

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Volume CLXV No. 2154

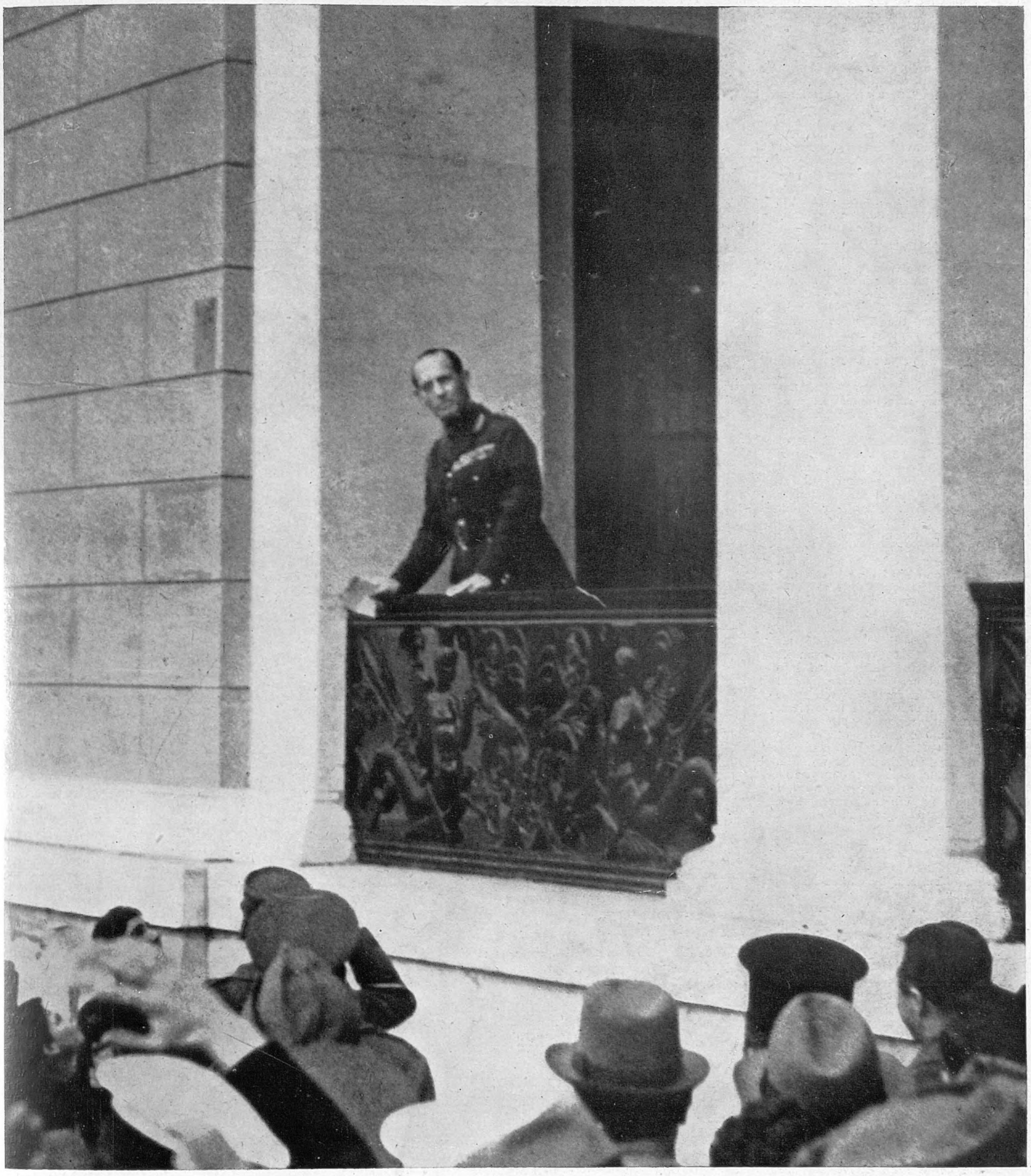
The SPHERE, London, May 3, 1941

THE SPHERE

With which is incorporated "THE GRAPHIC"

The Empire's Illustrated Weekly

London, May 3, 1941



THE GREEK KING SPEAKS TO HIS PEOPLE: A PICTURE FROM ATHENS BEFORE THE ENTRY OF THE GERMANS AND THE DEPARTURE OF KING AND GOVERNMENT TO THE ISLAND OF CRETE

This is one of the last pictures to be taken of King George of Greece in his capital, before the occupation of Athens by the Germans. The King was speaking to his people from a balcony at Army Headquarters ; his appearance was made only after the populace had been cheering and calling for him for some hours. To-day, King and Government are safe in Crete, where the struggle against the enemy will be carried on in conjunction with our own forces. The Greek Army has fought for months against great odds, and the Greek people have bravely borne the vicissitudes and terrors of war : with the coming of the Germans, however, it was not to be expected that the greatly outnumbered Greeks could withstand the heavy onslaught launched against them. This is not the first time that King George has been forced to leave his kingdom : his determination and that of his Government still endures !

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A WAR NEWSLETTER—No. 87

1, NEW OXFORD STREET, W.C.1.

Defeatism?—A SPHERE reader wrote recently to the Editor: "I am writing to suggest that this continual talk by politicians and others about victory should be dropped. No one knows that we are going to win this war. In the last, with France, Japan and Italy on our side, it took us four years to win the war. Would it not be better rather to talk of fighting to the bitter end and drop this talk which produces a false sense of security?" There are several reflections which this passage suggests. First: it will evoke inevitably a cry of defeatism or pessimism. As to that, I have already stressed the absurdity of our perpetually declaring that we are fighting to preserve freedom of speech and opinion, and then calling down curses on anyone who voices a minority or unpopular view. Second: realism is not defeatism. There *is* a real danger in the parrot-cries of junior Ministers and sub-heads of departments. We have a plethora of pronouncements on vital subjects by pundits of doubtful authority, and Mr. Churchill's grimness should be the keynote of the pronouncements of a very limited number of carefully chosen speakers. Third: men who think in this country are still deplorably few. Those who think treat the warnings and stimulants of second-rate pundits as they deserve. The sense of security felt by thinking men waxes and wanes by the action of established facts, not of prophecies or slogans. A majority of our race *is* influenced by unauthoritative talk, whether exuberant or depressing. Fourth: I see the danger which lies in advocating an end to all talk of "certain victory" (though there is much too much of it). The whole nation, frail and robust, has to be carried along to endure and to toil with faith, and not all of it can put its best effort into what may be just—a fight to the death. There is no final victory without a general belief in victory. Fifth: frail and strong, educated and uneducated, I believe this nation is not to be turned from its purpose, or to be disintegrated into defeatist factions, by reverses and suffering. Yet I cannot myself go so far as the writer whom I have cited. I have recently repeatedly stressed the indignity and foolishness of our easy triumphing after victories attained, which tends to make us less watchful and more vulnerable to the inevitable ups and downs of war. In a word, I go a long way with the writer, whose opinion I regard as honest. I think that the Premier should take measures to restrict and censor the speeches of small-fry leaders, and that our faith in victory should be voiced less freely and less often, and by chosen leaders who best know the facts. (But I see nothing foolish in any man continuing to believe that the Allied cause is invincible, on the long view.)

"Facing the Facts."—The facts which Mr. Algernon Cecil faces in his new book just published by Eyre and Spottiswoode are not the urgent, ugly facts of our situation in May 1941, but rather some of the facts which during the years between wars brought us where to-day we stand. I don't suppose that any logical person alive now questions the palsy and inconsequence of our 'tween-war diplomacy, or the degradation (not to say danger) to which it brought us. Political writers pick out the items which strike them as most egregious, and the cynic may derive stimulus from these marshallings of half-formed, half-hearted, contradictory policies. (Sometimes I ask myself whether our Empire to-day would have been worse off or better off by far if we had "remembered Canning," and if we had turned a deaf ear to Lansdowne and Delcassé and remained, as we were in 1901, aloof and in splendid isolation from the intrigues and treacheries of Europe; provided that in that splendid isolation we had built two ships for one [and two planes for one] built by our possible enemies, and gone all out to make America see things as we [should] have seen them. Our building programme would have been cheap at the price—dirt cheap judged by our balance-sheet to-day.) Mr. Cecil writes so quietly—all passion spent. He is like a chess-master judging a very amateur chess competition. He wastes no words on the condemnation of human frailty and folly. The paradoxes which gently tickle him most are these: (1) the Bayard Halifax trying by all means to win over as a brother-in-arms against Nazi-ism the bloodstained Stalin, fresh from hideous aggressions; (2) the crass gamble of the Polish guarantee, in the face of the eternal verity that diplomatic intervention must be limited strictly to the intervener's power ultimately to implement guarantee by force. Mr. Cecil, inevitably, is no more clear or constructive when he deals with the historic future than are a score of others who peer through the glass darkly; but he is much more realistic and therefore pessimistic. He sees a post-war world in which there is no political morality left and no Christianity surviving in Europe, and he sees the great European powers, Germany, France, Russia, Italy, as each and all unworthy of our trust for a decade at least. So do I; and that does not encourage me to believe in any brave new world in 1943.

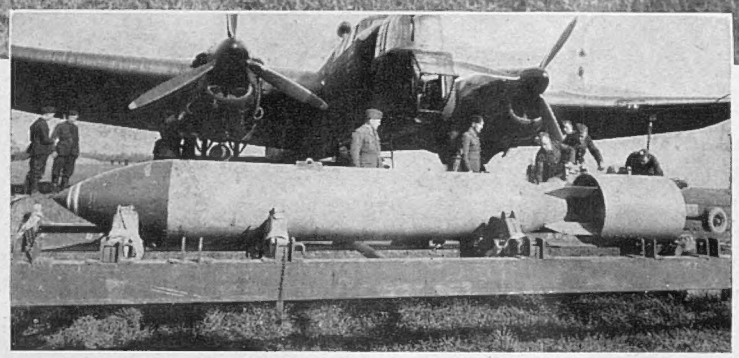
H.M.G. "BOCHE BUSTER"—ONE OF THE WORD'S LARGEST: Readers will remember the publication in this journal of a picture taken in September last which showed the King and Queen informally perched on a bench at the Artillery School of the Northern Command, whilst they were being told the story of the "Boche Buster." Here is a picture of this monster gun: it is mounted on a super-heavy railway mounting and should, by the looks of it, prove a terror to the enemy!

Creaks and Leaks.—It would be odd if, even now, our war machine did not show occasional faults and loss of power. It would be pure tragedy if it became "unpatriotic" to point out such faults as leap to the eye. In a rural area in southern England there are a few leaks and creaks still observable: *Petrol.*—It is abundantly clear that in these parts a further cut in petrol supply could be made without loss of efficiency to the military or civilian or Civil Defence efforts. There is still a great deal of unnecessary waste and duplication of means of transport. *Home-grown timber.*—Buying agent after buying agent comes round to small estates to look for timber. The owner takes them round and earmarks his trees for felling. The agent goes away and, if the conditions are not exactly to his taste from a purely commercially economic viewpoint, takes no action, and another "buyer" succeeds him. Meanwhile, the Ministry of Supply writes to the owner urging on him his moral duty to offer his trees! *Food.*—The waste of money on camps and hutments and the luxury of the fare provided for all types of military units continue to strike the pinched civilian (who himself works hard enough) as inequitable. He observes (in summer) the hecatombs of coal and coke in every military dump and the groaning boards of butcher's meat, and he sadly wonders when the even mean will be approximately attained.

"Sic Vos Non Vobis."—The Latin tag can be applied in two ways. By the crafty Italian to the Nazi, as he retrieves his sadly-burnt chestnuts from Nazi hands. Thus: "Soldiers of Italy on the Greek front! The enemy has laid down his arms. Victory crowns your sacrifices. Your Fatherland is proud of you. Long live Mussolini!" Or it can be applied by the contemptuous Nazi to the obsequious Italian, running to and fro, a clumsy messenger-boy, on Nazi errands and orders in every department of public and private activity in Italy. The slaves of the Nazis—the Duce's redeemed race—grunt and sweat under their humiliating yoke and eke out their little remaining stock of national pride with boasts of the victories which Germans have won for them—and the Duce loses no opportunity to conserve in his deflated gas-bag—which *is* the Duce—the last puffs of wind and gas. Long live Mussolini—at any rate, a little longer!

Figures of the Dead Past.—On April 18, 1824, Byron fell into a sleep from which he never woke, and on the same day in 1941 died Mary, Lady Lovelace, who could almost be regarded as the last *personal* link with him. She knew concerning him almost all that was to be known. She was fond of talk on every subject, but no topic, I am sure, was more constantly discussed by her than that of Byron since her marriage in 1880 to Ralph, afterwards second Earl of Lovelace. He was grandson of Lord Byron and of Miss Milbanke, who brought in the Wentworth barony and with it some family characteristics "gey hard" to live with. Lord Lovelace's latter days were mortgaged to a defence of his grandmother, by which Byron and his half-sister suffered in reputation as the result of family secrets given to the world by his own kith and kin. (No doubt the bombshell of *Astarte* would have burst one day under another shell. Indeed, Mrs. Beecher Stowe had exploded such a bomb in 1869 and Miss Mayne's fireworks were still to come.) But Lord Lovelace's *Astarte* left behind a legacy of trouble for him for the rest of his life and Lady Lovelace helped him to share it. At Ockham Park (and, in the days of plenty, at Wentworth House, Chelsea) Lady Lovelace entertained in a fashionable, literary way, and in the years that are gone I used sometimes to go down to Ripley to shoot partridges and peer at the Byron relics and discuss life and letters in her circle of writers, artists and "commonplace" sportsmen. She was almost to the last of her long life a handsome, stately, animated and witty woman; a little terrifying perhaps, yet she was always making firm friendships with people half her age. When I pass the "golden gates" of Ockham at the Ripley bridge I remember those visits as part of a dream voyage to a dead civilisation. . . . Indeed, there is almost nothing left to connect our life to-day with the world which virtually ended in 1914 and finally vanished in 1941. And so (since the fate of nations can be settled in a few hours, so that commentary thereon is stale news before I go to print) I will add a note on another figure from my buried youth—Jack Kimberley. Jack Wodehouse, when I went to my first school—St. Neot's at Eversley—slept in the bed next to mine in our dormitory. As I saw him then at the age of ten, so he always seemed to me. His courage, vigour, honesty and charm stood out in 1895 exactly as they did when I last saw him in 1939. In some ways he remained the boy he was then, to the end. He, too, was rather frightening. I should have been sorry to quarrel with him. I was careful not to do so. But, all the same, no bully and no nasty-minded boy had any chance of survival in his company. He was strong, decent, just, honourable and of infinite charm. *Pereunt et imputantur.*

Shakespeare, Cricket and Cuckoos.—Some of us will feel that the maximum war effort can best be attained and maintained by conserving at least a small ration of cultural and recreational relief for mind and body, take note with satisfaction of the reopening of the Stratford Festival and of faint promises of some cricket matches to come. The world of sanity and peace—which, after all, middle-aged men *did* enjoy for the larger part of their lives—seems so far away, behind and before us, that we can hardly hope to recapture to-day the atmosphere of its careless rapture. But if you asked me what April in England stood for in the happy years, I would try to answer, for myself, in some such words as these: It is a picture of Warwickshire on St. George's Day—Shakespeare's England, with grey church towers embowered in vivid new greener, flying each one the cross of St. George. Of green verges and banks gay with celandine and wild cherry-blossom, of copses musical with the notes of birds, and, mingling with that chorus, the first mocking notes of the cuckoo from a bare elm top, and from the village green the first sound of bat on ball. A warm westerly breeze from the Bristol Channel, carrying along with it the first scent of new-cut lawn-grass, children whipping their tops, with exact traditional punctuality, in the village street, and boys in grey flannel trousers hanging over the river bridges. And primroses, primroses all the way, tumbling from the hands of little girls. And lark song up in a pale blue sky and meadows painted with delight. Six times in our lives we have been robbed of all but a tithe of that supreme moment of rapture in the year, the essential sweetness of the year. But whatever we may be called on to endure, whatever the end may be, these things will remain and those who come through will taste the sweetness again and find it a hundredfold sweeter. If Death and Hitler seem sometimes to take all away, these they cannot take. The flag of St. George will fly proudly over Shakespeare's England, and over meadows painted with delight when Hitler is forgotten, and our children's children will still approve my little daub of spring in England. THE OLD STAGER

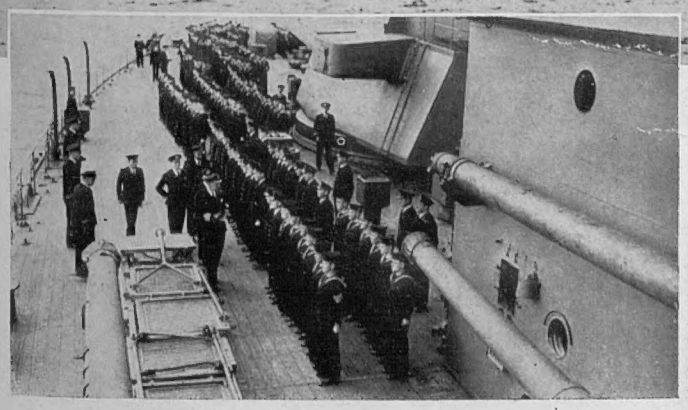


TWO OF THE "BIGGER AND BETTER BOMBS" WE HAVE BEEN READING ABOUT—AND WHAT THEY LOOK LIKE IN REAL LIFE!

Mr. Churchill has told us, more than once, that after having endured for months the terroristic bombings of German airmen, we shall soon be in a position to "give it back"—with interest. Lord Beaverbrook, the Minister for Aircraft Production, has also paid tribute to the "boys in the back room" who have produced the new bombs. The explosive power of these new bombs is stated to be five times as great as other bombs of similar calibre. The picture shown above is one of a series taken recently at a Bomber station in Britain: on the left is a two-thousand-pound bomb (nearly a ton!), and on the right a one-thousand-pound bomb. in the smaller picture is a close-up of the bigger specimen. These were ready for loading on to a Whitley heavy bomber for disposal over enemy territory

FOR RAIDS ON GERMANY

Preparing Fresh Surprises for Military Objectives on the Continent

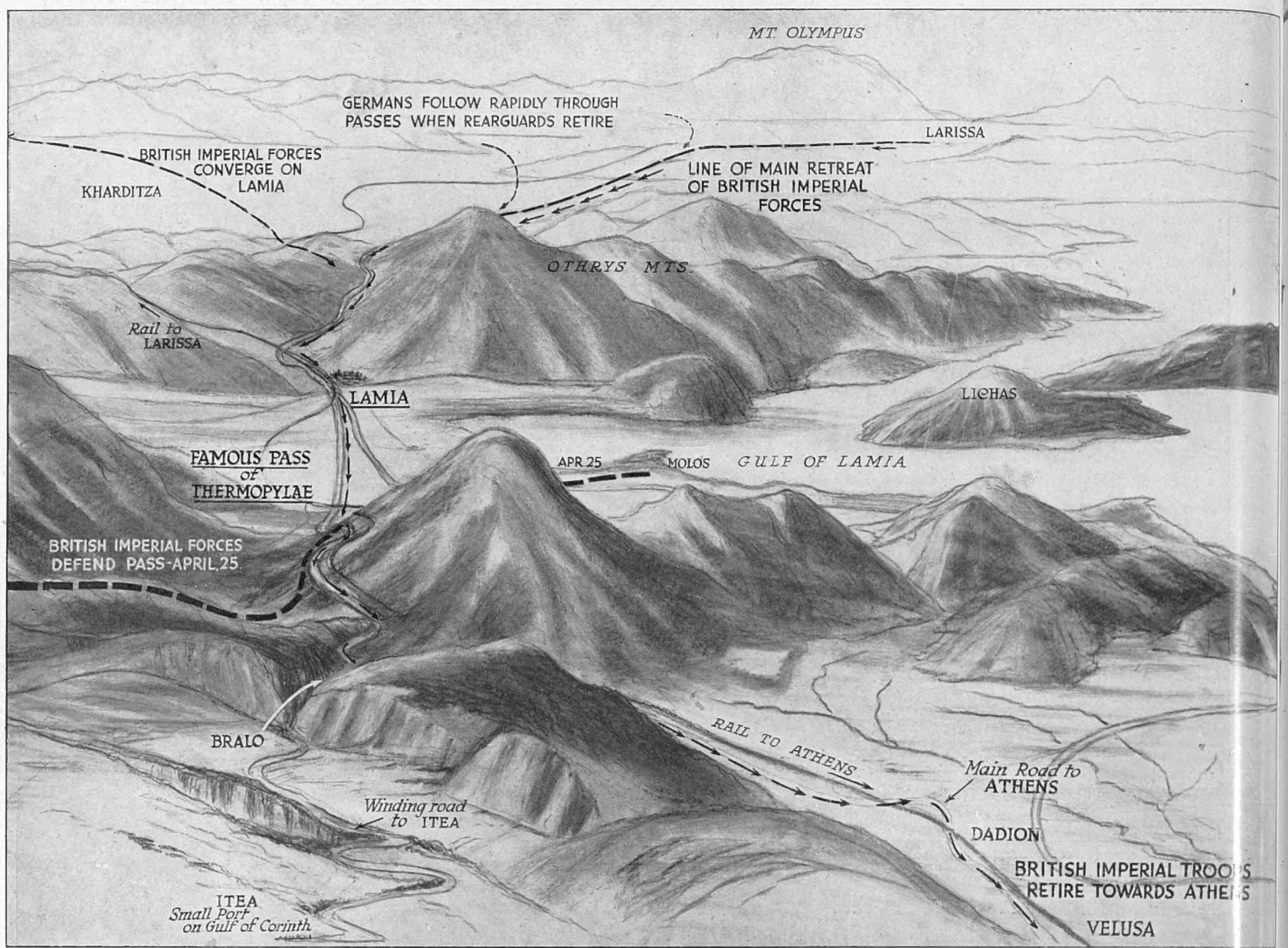


H.M.S. "PRINCE OF WALES," SISTER OF THE "KING GEORGE V," AND BRITAIN'S SECOND NEW BATTLESHIP OF 35,000 TONS

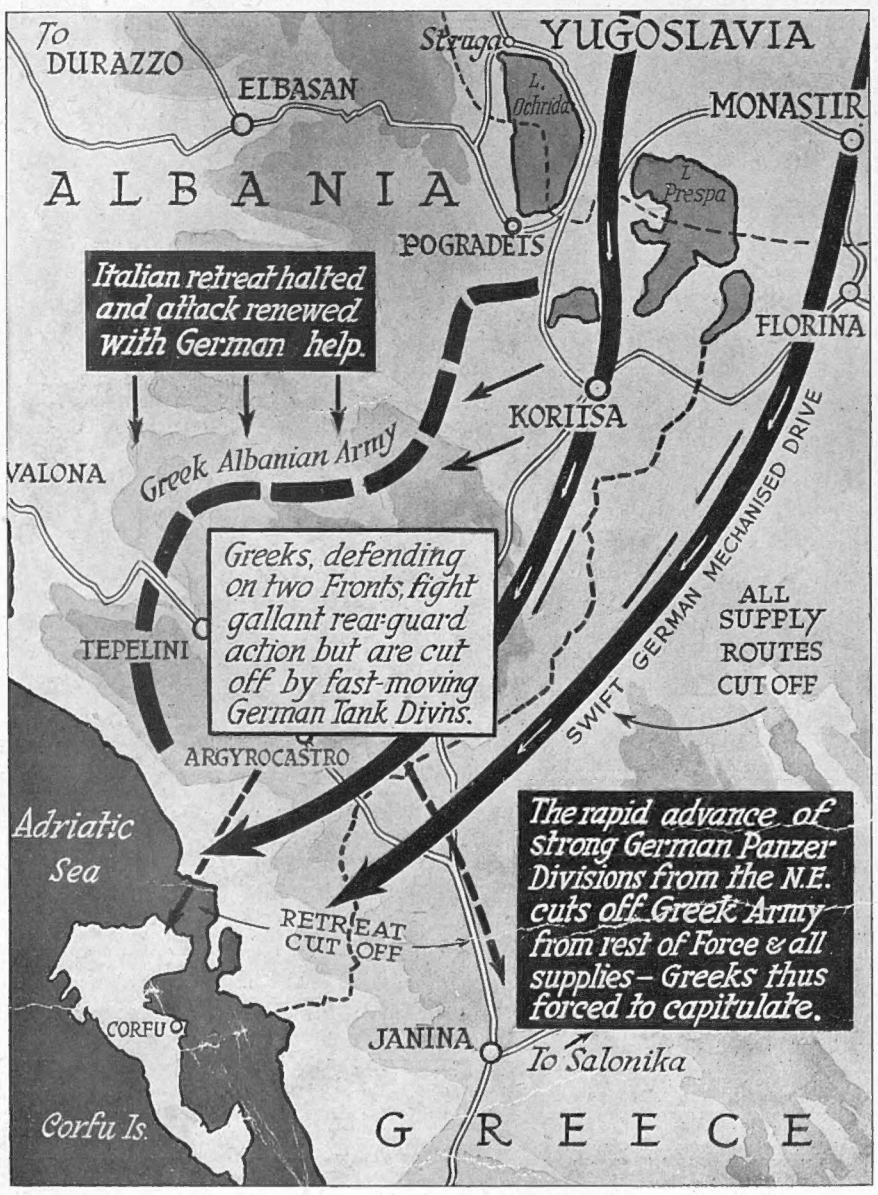
Following on the recent news that the *King George V* is now in service with the Royal Navy comes similar news of her sister-ship, H.M.S. *Prince of Wales*. Costing seven million pounds, the new vessel is a 35,000-ton battleship launched at Birkenhead in May 1939. She has ten 14-in. guns, each of which fires a 1,560-lb. shell: twenty-one tons can be discharged every two minutes. Her speed is a secret, but it is known to be over 30 knots; the ships of this class are, in fact, the fastest battleships in the world. At the waterline, the armour plating is 16 in. in thickness. There is a complement of 1,500 officers and men. The 14-in. guns mounted in these vessels have an effective range greater than the 15-in. guns of earlier ships. Four aircraft and a catapult are included in the equipment. The smaller picture on the left shows the Captain inspecting the ship's company during "Divisions"

THE NAVY'S NEW ADDITION

H.M.S. "Prince of Wales," Which is Now in Commission With the Fleet



WHERE ONE OF THE FINAL STANDS IN THE BATTLE OF PASSES TOOK PLACE: THE FAMOUS THERMOPYLÆ PASS SEEN FROM ABOVE BRALO: At the time of writing, the latest detailed news of the British-Imperial forces recorded the defence of the Thermopylæ Pass, so famous for the stand of Leonidas and his companions against the Persian host. By April 24-25, the British-Imperial Forces (the Australians generally in the centre, with the British and the New Zealanders to the left and right wings) had come down the main road from Larissa, across two or three intervening masses of hills, to the plain at Lamia, a town at the head of the Gulf of the same name. Several roads led out of Lamia, the main road keeping close to the railway; together they climb high on the side of the mountain to the right of the pass. Another road leads along the south side of the Gulf of Lamia. Enemy reports stated that certain captures of men and guns had been made at Molos, but this was unconfirmed. The main line of retreat would appear to be down the road to Athens, but, if conditions had been favourable, there was a tempting shorter route to the little port of Itea, on the Gulf of Corinth. Up to the time of writing the evidence points to the Piræus as the port of embarkation



THE BATTLE OF THE PASSES

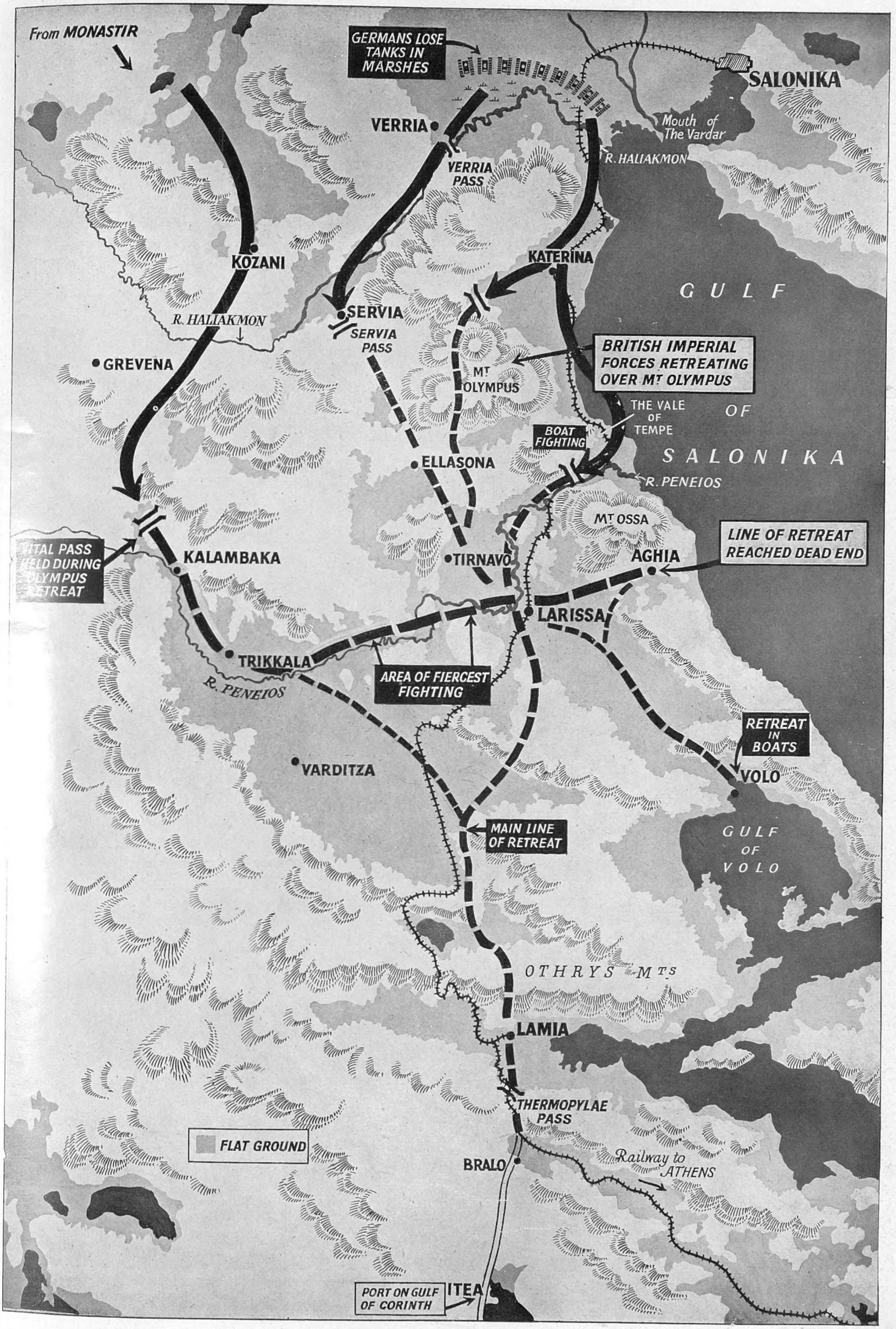
The Series of Rearguard Actions Fought Throughout Greece by the British-Imperial Forces for Twelve Days with Undaunted Courage

On left—

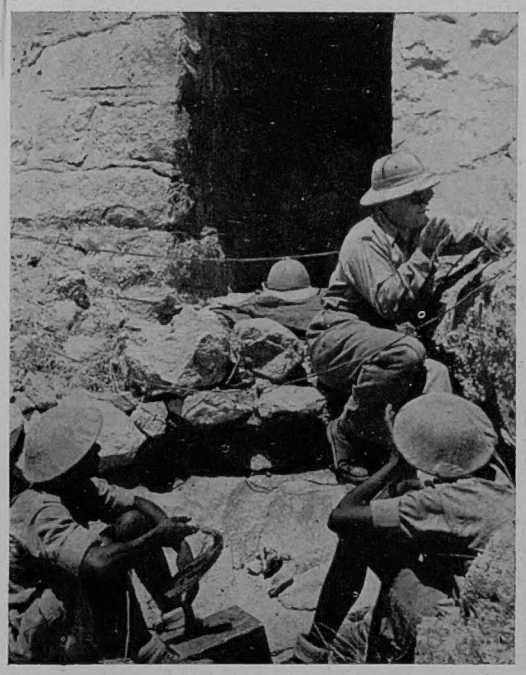
WHY THE GREEK ARMY OF THE EPIRUS WAS FORCED TO SURRENDER: Owing to the swift advance of the German motorised columns from Florina and Koritsa, the Greek Army which had been so bravely and successfully pushing back the Italian forces in Albania was cut off from all communication with the south. That meant that no food or ammunition could reach the army of the Epirus. The Italian forces massed against them in the north, and any possibility of cutting through to Santa Quarante and so to Corfu, as in the case of the Serbian Army's retreat in the Great War, was probably rendered impossible by the proximity of German tanks on the roads leading to the shore

On right—

HOW THE BRITISH-IMPERIAL FORCE FOUGHT ITS REARGUARD ACTION THROUGH GREECE: The detailed narratives of the fighting in Greece which were published last week revealed the real nature of the struggle between the advancing German divisions and the retreating British-Imperial Force. The use of the phrase "holding a line" from this point to that was misleading; the actions all resolved themselves into holding key passes while bodies of troops moved southwards from the Mount Olympus area towards the plain of Thessaly and the ports in Greece proper. The retreat is shown in detail from south of the Vardar marshes, where German tanks got into trouble in marsh areas. At several points in the German advance motorised columns also became embogged, notably south of Kozani. Around April 14 and 15 the action begins with the defence of the Verria Pass, followed by a retreat down the Haliakmon Valley to Servia, where a second pass was held, while British-Imperial (Anzac) troops threaded their way across the Mount Olympus heights. Before they were quite clear, a German threat developed at Kalambaka Pass. This had to be held with great tenacity until the troops and rearguard companies north of Tirnavo had passed through Larissa. Two other gates to the Thessalian plain had also to be blocked, a small one opposite Katerina and a larger one in the Vale of Tempe, where an attack by boats was repelled. The German attempt to cross the Peneios River brought about the fiercest conflict of all. The river ran red with blood. Some of our mechanised vehicles attempted to retreat via Aghia. Finding this a dead end, they turned south with another column to Volo, where they embarked on boats in order to complete their journey south. The main line of retreat lay across some intervening hills to Lamia and thence to the Pass of Thermopylæ, where one of the last rearguard fights took place. In all this fighting the actions took place in the passes and on the adjoining hillsides


From MONASTIR
GERMANS LOSE TANKS IN MARSHES
SALONIKA
VERRIA
Mouth of The Vardar
R. HALIAKMON
VERRIA PASS
KOZANI
KATERINA
GULF
SERVIA
SERVIA PASS
R. HALIAKMON
BRITISH IMPERIAL FORCES RETREATING OVER Mt OLYMPUS
GREVENA
Mt OLYMPUS
THE VALE OF TEMPE
OF
SALONIKA
BOAT FIGHTING
ELLASONA
R. PENEIOS
Mt OSSA
LINE OF RETREAT REACHED DEAD END
VITAL PASS HELD DURING OLYMPUS RETREAT
KALAMBAKA
TIRNAVO
AGHIA
LARISSA
TRIKKALA
AREA OF FIERCEST FIGHTING
R. PENEIOS
RETREAT IN BOATS
VARDITZA
VOLO
MAIN LINE OF RETREAT
GULF OF VOLO
OTHRYS Mts
LAMIA
THERMOPYLAE PASS
FLAT GROUND
BRALO
Railway to ATHENS
PORT ON GULF OF CORINTH
ITEA

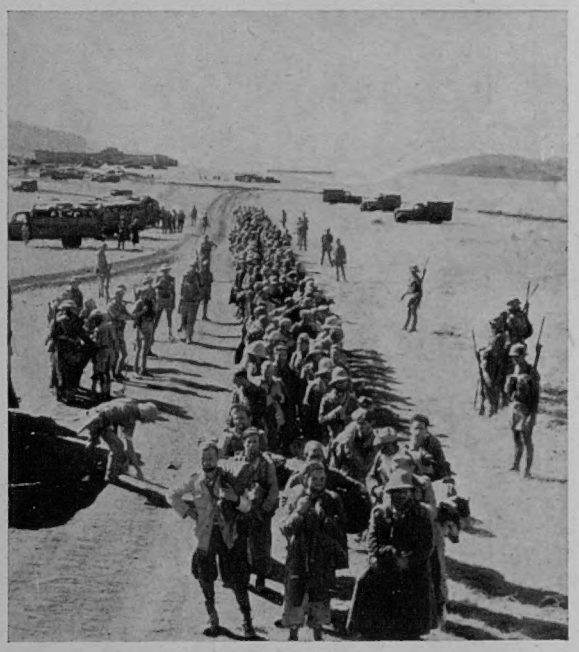
The ERITREAN CAMPAIGN



BROADCASTING THE BATTLE OF KEREN : Mr. Richard Dimbleby, the B.B.C. commentator, is here seen describing the progress of the battle. He is within sight of the troops up forward, and is making a record for transmission to listeners at home whilst actually under shell fire

AT A ROAD JUNCTION NEAR KEREN : Indian troops occupying what was formerly an Italian stronghold on the road to the mountain fortress. An Italian lorry lies on its side just off the well-constructed concrete road

ROUGH GOING FOR THE ARMOURED CARS : The sort of country over which our troops advanced. In addition, they also had to contend with demolitions made by the enemy



CAPTURED AT FORT MEGA : Some of the 600 prisoners waiting to be transported to a prisoners-of-war camp

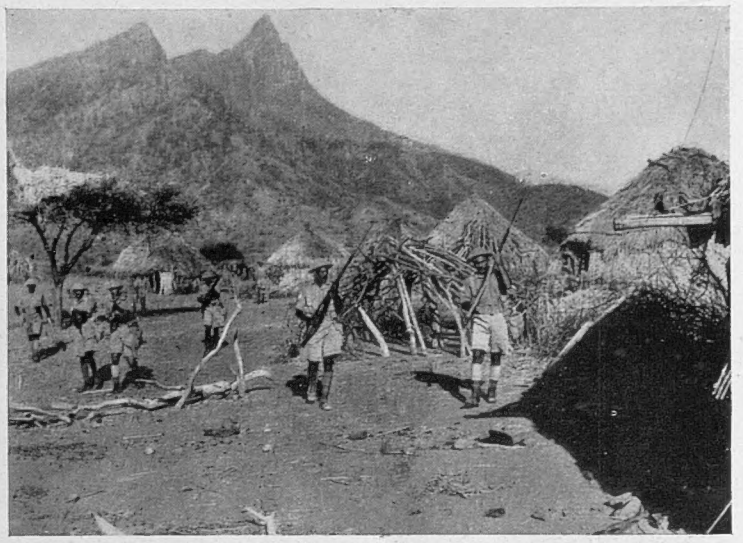
LIGHT TANKS CAPTURED AT AGORDAT : This important town lies on the route from Kassala, in the Sudan, to Keren, in Eritrea. It fell very early in the campaign; and at its fall a large amount of Italian material fell into our hands

CAPTURED ITALIAN GUNS AND MATERIAL IN FRONT OF THE FORT OF MEGA

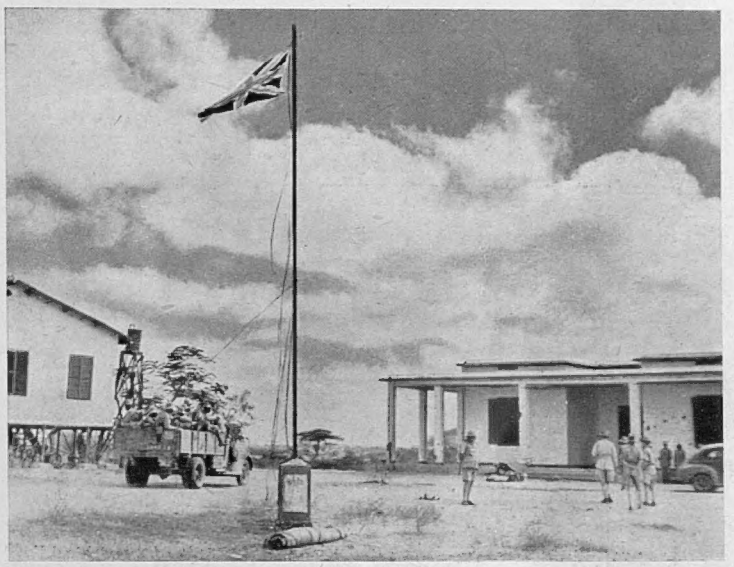
This strong point lies to the westward of Moyale, over the Kenya-Abyssinian border. It fell to advancing South African forces on February 20, when 600 prisoners were taken. The fort itself is strongly built of stone, in the Italian colonial style of architecture, and contained a big collection of armaments, most of which fell into our hands

Pictures of the Operations Around Keren, Agordat and Other Strongholds of the Italians in East Africa

AN OBSERVATION POST ON ONE OF THE HEIGHTS BETWEEN KEREN AND ASMARA : All the fighting in the Keren and Asmara regions took place under great difficulties, and at several thousand feet above sea-level. In these mountainous regions the Italians had ensconced themselves in a series of strong points, and were thus able to put up a strong resistance



HOW THE INDIANS CLEARED ERITREAN VILLAGES : Infantry co-operated with mechanised units in this work—the Bren-gun carriers ploughing their way through first, with the Indians following up behind to clear out the enemy



AFMADU IN SOMALILAND FLIES THE UNION JACK : Following heavy raids by units of the South African Air Force, this important post was captured without loss. On the left troops can be seen passing through, to press forward to the Juba river, 103 miles inside the borders of Italian Somaliland

A GENERAL VIEW OF THE IMPORTANT COAST TOWN OF KISMAYU AS THE BRITISH FORCES ENTERED

Kismayu was the starting-off point for operations against Italian Somaliland : it lies near the mouth of the Juba river, up which British and South African forces advanced towards the Abyssinian interior. Other forces went up the Somaliland coast towards Mogadishu, the capital, and other important Italian towns and strongholds. The retreating enemy did as much damage as he could in the town, and in the harbour much of the shipping had been sunk, including Italian steamships. Kismayu is thought to have been a base for enemy commerce raiders in African and Indian waters

THE MEN WHO FOUGHT for GREECE

AIR CREWS OF THE R.A.F. REPORTING THE RESULT OF A RAID TO A GREEK LIAISON OFFICER : Invaluable support was given to the B.E.F. and to the Greek Army by our fighters and bombers, who fought incessantly in the face of great odds

AFTER THEIR SAFE LANDING AT A BRITISH AIR STATION : Two members of the crew of a Blenheim bomber who had just carried out a successful raid on the Italians in Greece

FIGHTER PILOTS WAITING TO TAKE OFF : Now that the struggle on the mainland is over, the R.A.F. can at least look back to their exploits without regret. Although outnumbered, they took the air every day during the desperate rearguard actions which were fought by the British and Imperial land forces

A CAPTURED ITALIAN TROPHY, WHICH WAS HUNG OUTSIDE THE OFFICERS' MESS : The Italians have little to be proud of, despite that the Greek capital is now in enemy hands. Wherever *their* pilots were engaged by the R.A.F. in Greece, as previously in Albania, the Italian *Regia Aeronautica* came off second best—if they stayed for combat !

WOMEN ON ACTIVE SERVICE

A DETACHMENT OF WOMEN DRIVERS FROM BRITAIN ARRIVE IN CAIRO FOR SERVICE WITH OUR FORCES IN THE MIDDLE EAST

THE WORKING UNIFORM OF THE WOMEN'S MECHANISED TRANSPORT CORPS IN THE MIDDLE EAST : A company of the Women's Mechanised Transport Corps has just arrived in Cairo for service with the Middle East Forces. It consists of fifty-one girls from the British Isles, with their Commandant and a number of ambulances. The members of the Company are responsible for the maintenance and repairs of the vehicles as well as driving them. They all have their First Aid Certificates and are very specially trained for the work they have to do. Whilst on active service they have their own canteen and repair shop

LIFE IN THE "INVASION PORTS" OF FRANCE

A Description of Some of the Very Vital Targets in Occupied France Consistently Bombed by the R.A.F.

By FERDINAND TUOHY

THE move made by the pro-Nazi Mayor of Occupied Bordeaux, ex-Senator Marquet, with a view to stopping the British bombing of the region, needs to be taken in conjunction with Vichy's first publication of a casualty list in connection with the raiding of a French port. This said that at least 76 persons were killed one night in Brest, on the occasion of an R.A.F. bombing of the *Scharnhorst* and *Gneisenau* (let us always hope those aren't dummies lying there !).

Marquet has gone the length of asking U.S. Ambassador Admiral Leahy to put the matter before President Roosevelt. As it is known that Darlan has long let go his reputed "Gascon jet" concerning the battering of the French ports, two of which, Dunkirk and Lorient, he greatly developed, we should be wise to prepare ourselves for a new twist to Nazi-inspired Vichy propaganda.

Of the string of ports bombed, Bordeaux probably has the least cause to protest. If I were on the air, I should ask Marquet the number of Bordelais so far killed by our bombs. Or, rather, I should ask a local neutral consul—the American, by the way, has been moved on—since Marquet would be wholly unreliable, as befits one who played a much bigger part in the French Surrender than has yet been realised. As local mayor, he set the stage for Laval and the treachery of June 18.

The chief Bordeaux target is the Merignac Aerodrome, main base of the Focke-Wulf bomber-scouters, which can range more than a thousand miles out to the Battle of the Atlantic, and if that airfield isn't a military objective at this time, what in old Harry *is* ? Moreover, Merignac is a surburb four miles from the centre of Bordeaux. For civilian safety, the immediate fringes of the airfield merely need to be evacuated at night, not such a terrible thing to ask of a town which owes the birth of its liberty and prosperity to England — aye, Mayor Marquet, for much of three centuries your mayoral predecessors were likewise Lord Mayors of London !

The R.A.F.'s second local target, the Bacalan chemical works, lies closer to the *Centre*. It is on the docks, which extend for five miles in a sweeping curve of the broad Garonne. The celebrated wine warehouses along the quays housed a good deal of the 90,000,000 gallons casked in an average year: let's hope *they* have not been laid waste. Fortunately, the shipbuilding yards, another target, are across the river away from the town. These yards, Bordeaux's leading industry, built many fleet units and are known to have had orders for "invasion craft," some of which have been tried out on the sandy shores washing the Landes.

The great pine forests of the Landes begin after Merignac, and extend due south for 150 miles. Several inland lagoons need watching, for they were formerly used for transocean experimental flights by the French Navy.

A fourth local target is Pauillac, 30 miles down the mouth of the Garonne, prominent for its white wine but also as advance port of Bordeaux, and for its steel-works. At the mouth of the estuary, 60 miles from Bordeaux, is the "posh" advance-port of Le Verdon, designed for American custom. The Bordelais could profit more by glancing up at Europe's tallest lighthouse, here commemorating the first American landing in 1917, than by heeding their de-naturalised Mayor, whose actions must make Clemenceau, son of a Bordeaux doctor, twirl in his lonely grave.

I have read only of one bombing of the 250 miles of coast north of Bordeaux, leading up to Lorient. This was of St. Nazaire, at the mouth of the Loire 30 miles below Nantes. We do not bomb Rochefort. Lorient is another matter. Let me quote from a recent Overseas broadcast I made :

"In the last war Bruges was the worst U-boat nest, until its inland waterways were partially blocked. The nearest reproduction in this war is the Breton port of Lorient. Lying snugly 4 miles inland on the estuary of the Rivers Scorff and Blavet, it is rich in creeks and waterways, which make it an admirable wartime submarine base. At Lorient, and its smaller, water-linked neighbours, Kéroman and Port Louis, U-boats can creep from point to point, or can lie in the narrow, deep channel winding from the town down to the sea. The main target of the R.A.F. is the so-called 'War Port,' comprising docks, arsenal and yards. This lies away from the centre of the town, and was rebuilt by Admiral Darlan, who frequently visited Lorient, his special pet."

The guide books called Lorient "dull." Ugly, yes, but a bright seafaring centre, the last time I saw it, into which picturesquely attired Bretons and Bretonnes flocked to market from the loveliest surrounding countryside this fair province yields. The cocktail being completed by the ubiquitous *gars de la Marine*.

Where are Lorient's 45,000 former inhabitants to-day ? The answer to this applies in considerable degree to all the French bombed or "invasion" ports. Thousands of Lorient's menfolk must be scattered with the French Fleet, or prisoners of war. As for the general population, many have been removed from the coastal belt throughout Occupied France ; others have not returned from last summer's *sauve qui peut*. Broadly, the Germans only allow such persons to remain in the French ports as are of service to them or are of direct consequence in the maintenance of local life and order. It is doubtful if much more than a third, certainly less than a half, of former populations endure.

THE CREWS OF BRITISH VESSELS SUNK BY THE GERMAN COMMERCE-RAIDING CRUISERS COME ASHORE AT BREST : A picture recently received in this country from the Naval Base which the R.A.F. have so consistently bombed during the past few weeks. The vessels in which these men served were sunk by the German cruisers, *Scharnhorst* and *Gneisenau* ; and the seamen are here seen being marched off to an internment camp, escorted by German soldier-cyclists

Take Brest. Running neck and neck with Lorient, Brest has been raided more than fifty times. Long before the two big cruisers put in there, the port was being used by destroyers, U-boats, and light cruisers engaged in the Atlantic and the Western Approaches close to English shores. The target-area at Brest is clearly defined. The built-over valley of the River Penfeld flows into Brest roadstead and divides the town in two : the seafaring suburb of Recouvrance, and Brest proper. On both sides of the Penfeld's mouth, and extending inland for a mile and a half, is the naval dockyard. Dominating it, a hundred yards away, is the medieval Castle, often rebuilt and now doubtless serving as Military H.Q. for the Germans, as it used to for the French.

Without doubt Brest has been badly battered. It was that already on June 30 last, when the Free French-to-be aided in the work of destruction prior to sailing for England. The fact of the target being in the middle of the town is not so good. Yet the Brestois have only to keep well away from the dockyard area o' nights and they 'll be safe enough—far, far safer than the people of Portsmouth under indiscriminate Nazi bombing.

But how many of Brest's former 60,000 do remain, one wonders ? The port has lost most of its *raison d'être*. It possessed five sources of life. The Navy and arsenal ; its commercial port ; several industries ; its fishing fleet ; and its situation as hub and tourist centre of rugged Finisterre. Now think how many of those are still functioning. Chiefly the arsenal and one or two industries. The former used to employ 7,000, many quite "Red." The Germans may well have kept a large number at work ; if so, that 's their look out, working in a job directly aimed against this country. Brest must be a sad place. Nevertheless, its inhabitants, especially the women, are intermittently defiant of the Nazis. Not long since, Brest was fined 50,000 francs because (a) women were found to be artfully sporting De Gaullist favours, (b) the Italian Consul was spat "against," (c) refuse was unaccountably tipped from windows as Nazi troops marched below.

Now turn the corner into the Channel. I must pass by such small harbours as Roscoff, Paimpol, and St. Brieuc, though they could well hide the smaller "invasion craft." We come to the St. Malo-St. Servan agglomeration at the mouth of the Rance. Here are some perfectly good docks, oil storage, a railhead, to say nothing of a Nazi holiday ground (as I hear) at neighbouring Dinard. The big tidal sweep probably renders the estuary unsuited to U-boats. However, St. Malo is a potential minor thorn. So far as I can trace, we 've bombed it once only in almost a full year.

Most of this region's 30,000 inhabitants are believed to be still there, the Nazi check not being too stern. As a general rule of the ports, the Nazis only allow such people to remain, or return, as are proven adherents, useful to their war effort, or to the basic upkeep of the district. Passes in and out of the ports are rarely given to relatives living inland.

Cherbourg has been treated less lightly. But consider ! Here is a fortified, ultra-modern port, barely eighty miles distant from Weymouth. It has a mole over two miles long, punctuated by forts, and inside, to the left of the town, is a vast area covered by an arsenal, dockyard, naval aerodrome, and endless barracks. Cherbourg has been plastered on repeated occasions, and once bombarded, and the town has certainly far from escaped, but not many of its 38,000 inhabitants are there to suffer.

Havre is another to suffer severely. Its normal population of 165,000 has been much reduced. Havre used to be the third port of France and has an immense surface of docks, warehousing, and building yards. Thinking we should not interfere with so big a town, the Germans proceeded to billet troops there in heaps ; but in that they slipped up, as a particularly fierce R.A.F. raid was to testify. A large number were killed at a Casino celebration, attended by officers. Havre is not only a major railhead and assembly point. It contains a big branch of the Schneider armaments firm, now totally in Nazi hands.

Now occurs a wide gap in our bombing, which leaves the layman slightly mystified but for which the R.A.F. obviously have their answer. For 150 miles of coast from Havre to Boulogne, I can trace only a couple of bombings—of Dieppe and Fécamp. Yet this coastline fronts our South Coast from the Isle of Wight to Dungeness. Fécamp is a sizable fishing headquarters, with well-shielded little harbour. Dieppe was knocked about last summer and pictures suggest its narrow harbour to be blocked at the entrance.

Boulogne, Calais, and Dunkirk form a final cluster of their own. As we know, they are under constant bombardment. The three together used to count just under 150,000 inhabitants. If a third remains, that 's as much as it is—and many of these sleep outside. Boulogne has not been hit as hard as the others, and the Upper Town is said to be fairly intact. But it is different down by the docks and in the Basse Ville formerly favoured by tourists.

My reckoning is that, omitting Bordeaux, some 200,000 French people remain in or around the ports systematically visited by the R.A.F. That 's not much out of a population of 40,000,000, and let our Free French broadcasters put it that way, and so cut the ground from under Marquet and his breed.

THE U.S. COAST GUARD CUTTERS

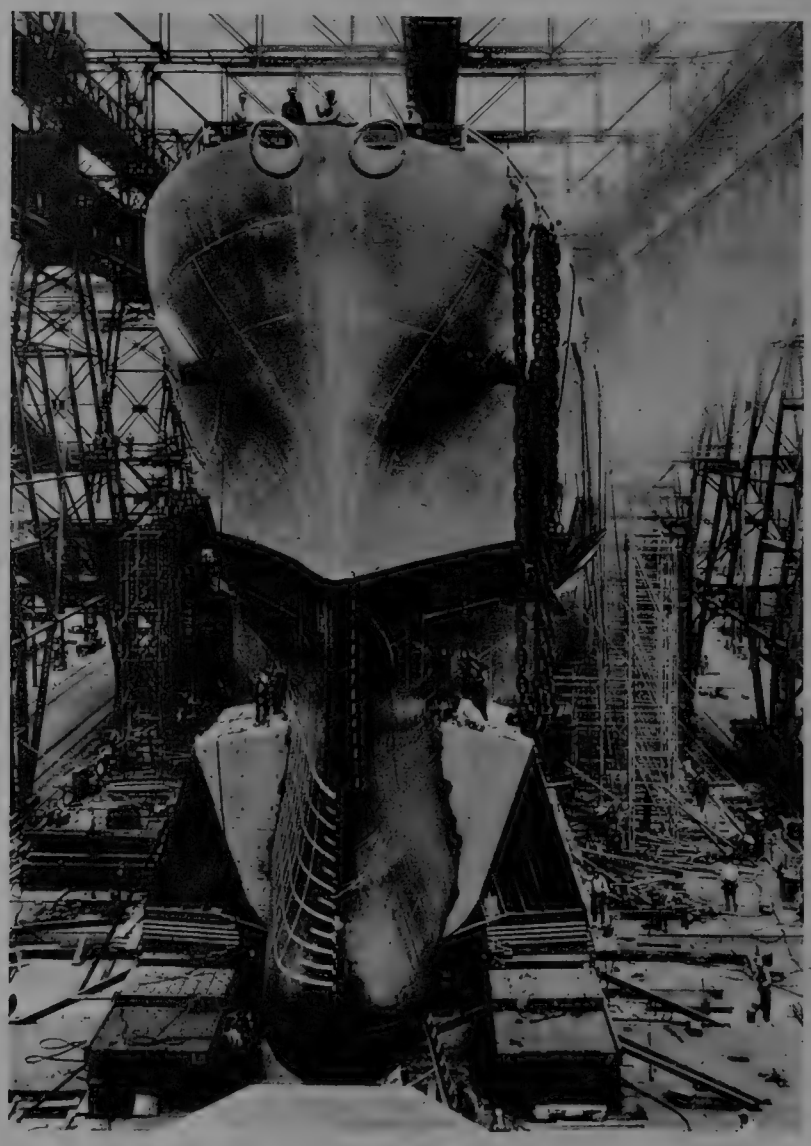
Ten of which have been Sent from the U.S.

MR. CHURCHILL'S announcement to the House of Commons that ten U.S. Coast Guard cutters had been placed at the disposal of the British Navy and would soon be in action, is of great importance, for this is a type in which the Navy is absolutely deficient and which can be of immense use for protecting the food ships. The title is, however, misleading. The layman will generally imagine a coast-guard cutter as being a fussy little vessel for the protection of revenue, a very poor relation to the Navy, and may even particularise by recalling U.S. Coast Guard cutters of the tug type seen in New York Harbour.

The ships which are to be taken over are very different vessels—useful fighting ships in every way—and the greatest care had to be exercised in their design to keep their displacement to within the 2,000 tons which would class them as cruisers under the London Disarmament Treaty. The U.S. Coast Guard Force is, by constitution, the first reserve of the U.S. Navy, and all its ships are specially designed and built to take their place in the Fleet in wartime. They are not armoured in any way, any more than a naval sloop would be, and their accommodation is rather better than that of the average man-of-war on account of their peacetime duties.

Of the bigger classes, to which Mr. Churchill obviously referred, the Service has nearly two dozen in commission. Their construction started in 1921 with the Mojave type, 1,780 tons, with an armament of two 5-in., a 3-in. anti-aircraft and two 6-pounder guns, while turbo-electric machinery drives them at a speed of 15 knots. The *Northland* was specially designed for service in the Arctic, and for protecting the Behring Sea seal fisheries from the raids of the lawless poachers about whom Kipling wrote. The Cayuga class, built from 1928 to 1931, is 1,975 tons, with a speed of 16 knots and the same armament as the *Mojave*. Finally, the George W. Campbell class, built in 1935, has a displacement of 2,000 tons, a speed of 20 knots and an armament of two 5-in. and four small anti-aircraft guns. When they were built provision was made to mount two more 5-in. guns if they were needed, converting them into very powerful sloops, and, on the other hand, one could be dismounted and replaced by a seaplane. All these ships are conspicuous by their very large radius of action, being provided with sufficient oil fuel to let them steam 8,000 miles at a good average speed. This is necessitated by the very wide range of their peacetime duties, which cover everything—from maintaining the North Atlantic iceberg patrol to salving disabled ships and protecting the revenue.

The U.S. Coast Guard Service itself is one of the most interesting forces in the world and was established as long ago as 1797. It thus has the longest record of continuous service of any American force, for when it was founded the U.S. Navy had been disbanded after the War of Independence and was not reconstituted until later, with the Coast Guard Service as its first reserve. The Coast Guards have fulfilled that function ever since, and both ships and men have done splendid work in every war in which their country has been engaged. The material varies from the big cutters which are being transferred to us to fast patrol motor boats used for running down smugglers. The personnel is on naval standards, with two rear-admirals at the head and all the naval ranks down to boy. Enlistment is for three years, and a large proportion of the petty officers and ratings go to responsible jobs ashore as soon as their time is up, with the result that the force has a very large reserve of trained men. Its second reserve consists of all the keenest American yachtsmen and motor-boat racers, similar to our R.N.V.R.



ONE OF THE LARGEST AND NEWEST ADDITIONS TO THE U.S. FLEET: The U.S.S. *Washington*, seen on the stocks at the Philadelphia Navy Yards prior to her launching in June of last year. She is a sister ship of the U.S.S. *North Carolina*, and has a displacement of 35,000 tons. Measuring 750 ft. in length, she is fitted with nine 16-in. guns mounted in three twin turrets, sixteen 5-in. guns, and carries four aircraft

THE UNITED STATES FORGES AHEAD

The Early Completion of the "North Carolina"; and other 35,000-tonners—Discussed by FRANK BOWEN

THE commissioning of the new American battleship, *North Carolina*, a good six months ahead of schedule time has naturally aroused the greatest interest and enthusiasm in the United States, for she is the beginning of the new first line against Japanese aggression and marks a new era in American capital-ship design. She also permits a very interesting comparison between the 35,000-tonners built by the British, German, Italian and American Navies. The Japanese have to be left out of this; their carefully-arranged veil of secrecy makes it uncertain as to whether their new ships will be 35,000 or 40,000 tons, and no authentic details have been released to the public.

The British 35,000-ton class consists of the *King George V* and the *Prince of Wales*, whose completion has been announced, the *Beatty*, the *Jellicoe* and the *Duke of York*. Whether any of these have been completed and what is the state of the remainder are naturally questions whose answers would be of the greatest value to the enemy. The Germans have the *Bismarck*, which may or may not have been completed, according to the story of their propaganda department, the *Tirpitz* and two others. The Italians have the *Littorio* and *Vittorio Veneto*, completed, but already badly damaged, and two others; while the Americans have the *North Carolina* completed, the *Washington* close behind her, and four others which may not be of quite the same design.

The ships differ very radically in appearance. The *King George V* has two funnels fore and aft, fairly widely spaced, with a complete gap in the superstructure between them, a big bridge and a tripod mast abaft it, with a tall mainmast. The *Bismarck* is distinguished by her huge sheer (the rise of her deck forward), one bizarre funnel festooned with galleries and fittings, and a big tower-mast which is an exaggeration of that in the *Admiral Graf Spee*. The *Littorio* has a rather small tower, with a light mast abaft it and two funnels fore and aft; while the *North Carolina*, whose design has been radically altered since she was first suggested, has

Drawing by Montague Dawson

AMERICA INCREASES HER FLEET: The U.S.S. *North Carolina*, the new 35,000-ton battleship, just completed well ahead of schedule (*behind*) and one of the very fine new Destroyers, with excellent lines (*in foreground*). Both these vessels have the typical American bow

a big sheer forward, a tower with a light mast abaft it, and two funnels placed abreast, truncated cones with flat sides, which allow for good clear deck.

The main armament is different in each case. The *King George V* has ten 14-in. guns arranged in a novel manner which has been given a great deal of attention. The forward and after turrets carry four guns each, and the second, firing over the forward one, two. The *Bismarck* has eight 15-in. guns arranged in precisely the same manner as those of the *Queen Elizabeth*, which was designed before the late war, although the Germans claim that their new 15-in. guns are better than hers. The *Littorio* has nine 15-inchers in triple turrets, two of them forward and one aft, while the *North Carolina* has the same arrangement, but 16-in. guns instead of 15-in. In the secondary and anti-aircraft armament, very important matters with modern ships, there is the same variety of ideas.

The protection is a feature which has been kept very secret and the only definite information is that the *Littorio* has a belt with a maximum thickness of 12 ins. and very wide distribution. The *Bismarck's* armour is a close secret to the public, while the British and American designs are both reported unofficially to have 16 ins. over the vitals amidships and little at the ends.

All the ships are well-equipped with planes. The *King George V* has her hangars amidships with a catapult fixed athwartships between them, the reason for the complete gap in the superstructure. The catapult fixed in that position is a British idea; it is economical in space, does not interfere with gunfire any more than is absolutely necessary, and has proved most effective. The *Bismarck* is reported to carry four planes, with two catapults over the hangars amidships; the *Littorio* has three, with the hangar and single catapult on the quarter-deck aft; and the *North Carolina*, with one more plane, has them in the same position, but with two catapults.

In the engine-room department the British ship has geared turbines of 152,000 shaft horse-power for a speed of over 30 knots. Details of the engines and boilers have not been published, but it is announced that the latter weigh 15 per cent. less than they would do if they were on the same system as the *Nelson* and *Rodney*, which suggests high pressure. The *Bismarck's* speed is 30 knots, but the horse-power is not published; for the same speed in the *Littorio* it is 130,000, but the lines of the ship have an influence. The *North Carolina* is rather slower, her designed speed being 28 knots with 115,000 horse-power, but her boilers, working with the unusually high pressure of 600 lb. to the square inch, are of a new pattern.

ONE OF THE TWENTY TORPEDO CRAFT READY FOR SHIPMENT BY THE U.S. TO THE BRITISH NAVY

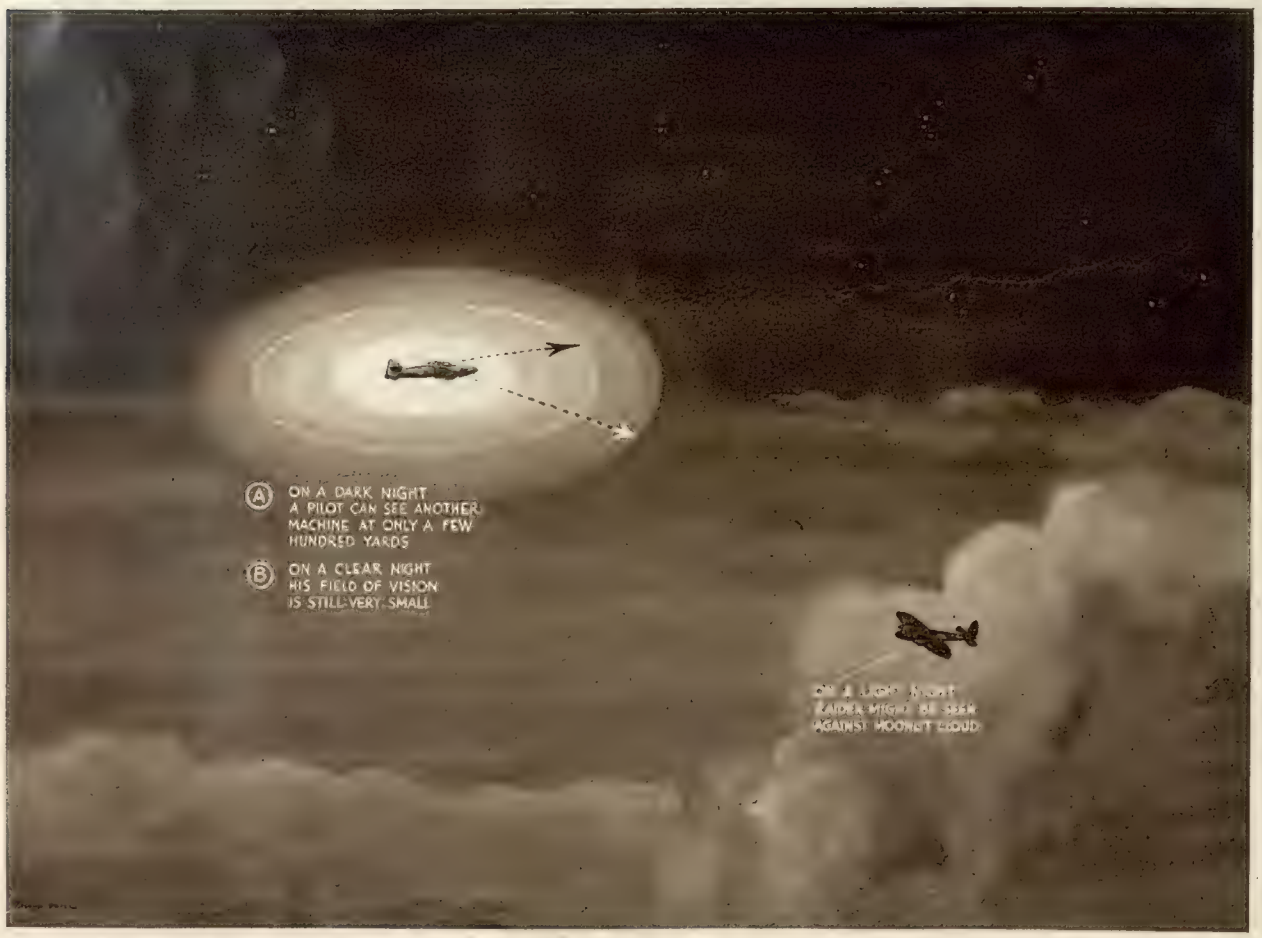
Colonel Frank Knox, Secretary of the U.S. Navy, has announced that twenty 4" mosquito " torpedo craft are now ready for immediate shipment to this country. These are 70 ft. in length and have a high speed: they were originally completed by the Electric Boat Company of Bayonne, New Jersey, and were turned back by the U.S. Navy to the manufacturers for re-sale to Britain

The RESCUE of FIVE BRITISH AIRMEN at SEA

A BRITISH DESTROYER PICKS UP THE CREW OF A BOMBER AFTER TWENTY-FOUR HOURS AT SEA IN A RUBBER FLOAT—*Drawing by Montague Dawson*

A stirring story was recently released by the Admiralty of the manner in which a British destroyer rescued five airmen adrift at sea. The airmen had been on a raid over enemy territory, when their aircraft was forced down on to the water. They took to their rubber float and for twenty-four hours drifted at the mercy of the waves. When sighted in daylight by the destroyer they had used up all their flares: after a bath and a warm meal none of them seemed to be the worse for their adventure, and all five posed for their photograph on the destroyer's deck. Incidentally, they managed to salve their float, together with its inflation gear and oars! Many lives have been saved by means of these rubber contraptions, which occupy so little space and which look so frail: they are now fitted to all British (and most enemy) bombing and reconnaissance aeroplanes

The NIGHT FIGHTER and HIS DIFFICULT TASK



THE PROBLEM WITH WHICH THE BRITISH NIGHT FIGHTER IS CONFRONTED—*Drawing by Roland Davies*

The problem of the night fighter is the problem of locating his quarry: once that has been achieved the rest is comparatively easy. But on a dark night, a pilot can see another machine only at a few hundred yards distance—and then only if there is no mist; even on a clear night his range of vision is still very limited. When there is a moon, and the night is bright, a raider might be located if his form is shown up against moonlit cloud

THE NIGHT RAIDER

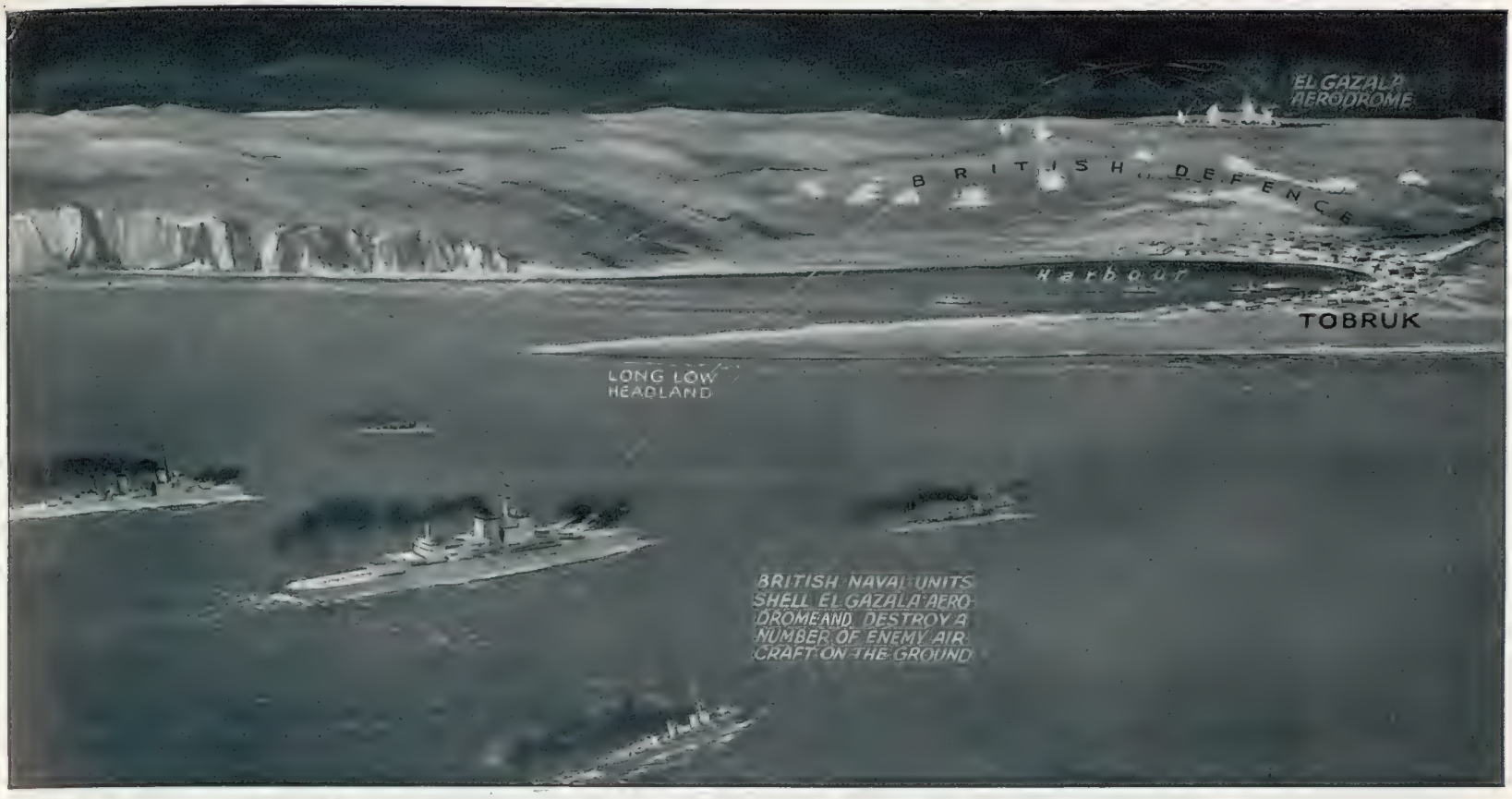
RECENT devastating night raids in greater force than ever before have refocused attention on the problem of defence. The daylight attacks were defeated by the Royal Air Force when they exacted a toll of between 10 and 15 per cent. on every enemy assault.

Not unnaturally, the same results have not been gained at night. In fact, except at moonlight periods, our defences have been shooting down over England an insufficient number of the raiders. This is not good enough. Such results will not prevent the enemy from continuing his attacks. Production and repair can keep pace with the casualties and even increase the strength.

A regular loss of 10 per cent. would mean that with a raiding frequency of every other night and a replacement rate of even 50 per cent. per month, the game would not be worth the candle in less than three weeks.

A unit of 100 bombers on this basis would lose its total strength in 10 nights of raiding and be replaced by only some 34 machines during that time. At this rate strength cannot be maintained.

So there is the destructive rate at which our fighters have to aim. At the present strength and frequency of the raids, if they can bring down 20 aeroplanes per raid, they can stop the attacks. The record so far is 13 in one night. As experience and technique improve, we can hope for those 20 eventually—perhaps by the winter.

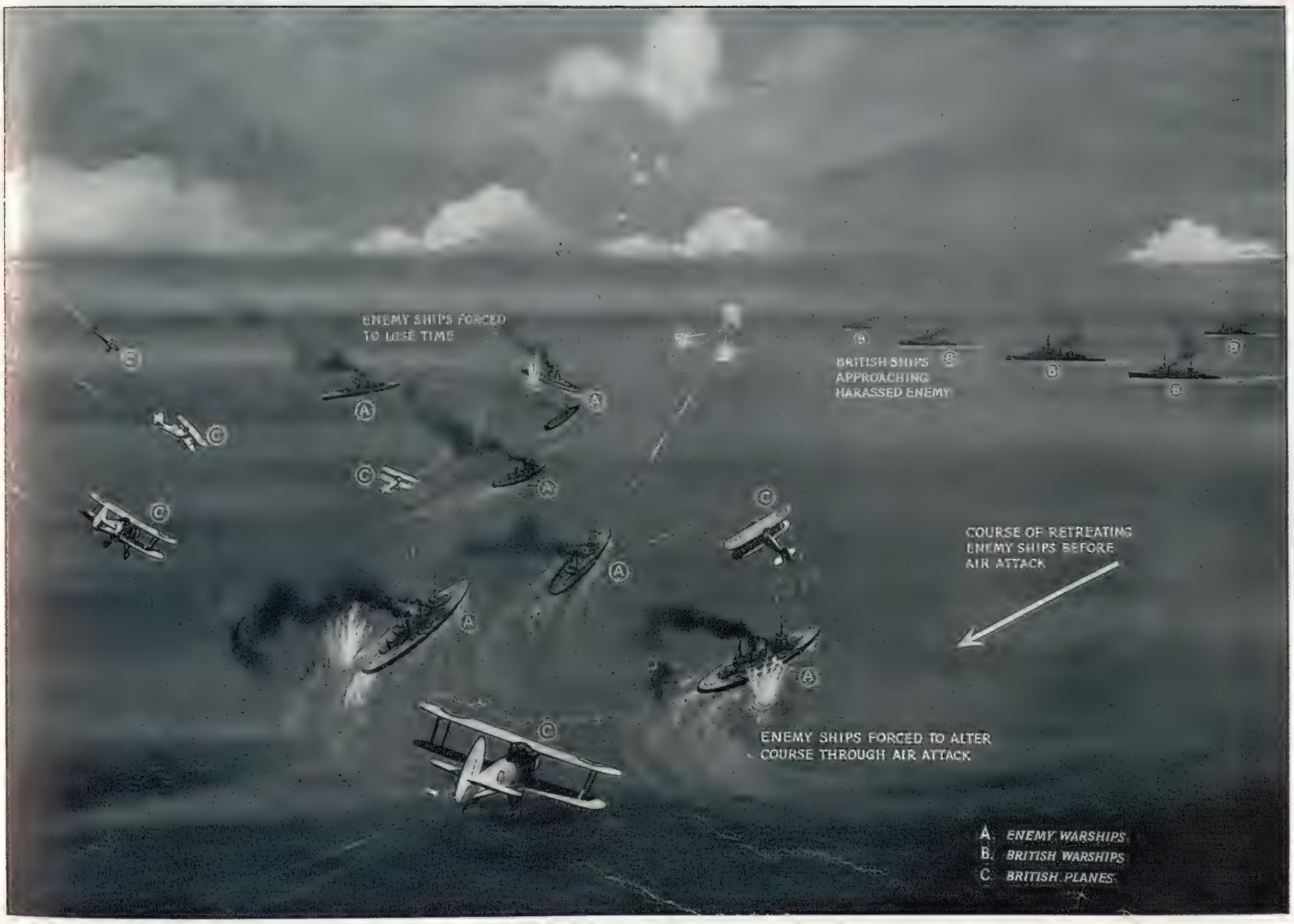


SEA POWER STILL COUNTS IN THE MEDITERRANEAN: THE BRITISH NAVY TAKE A HAND IN THE OPERATIONS AT TOBRUK, and bombard El Gazala aerodrome from the sea, over the heads of our garrison at Tobruk—*Drawing by E. G. Lambert*

NAVAL AND AIR OPERATIONS IN THE MEDITERRANEAN

The Bombardment of the North African Coast: and a Look-back at the Matapan Action

Sea power has again been demonstrated by the Royal Navy along the North African coast, where the enemy—this time the German Armoured Divisions—is now entrenched. Admiral Cunningham has reported that the enemy's operations on the Libyan coast are "being constantly and successfully harassed by bombardment from his Majesty's ships." On the escarpment road to the west of Sollum enemy positions and transport columns were bombarded; and El Gazala aerodrome, to the west of Tobruk, was heavily bombarded over the heads of our own defenders in that port. This is the action depicted by our artist above. As a result, at least five enemy aircraft were destroyed on the ground—and the enemy was taught that the British Navy is still in command of the waters of the Mediterranean!



"LIKE BEATERS AT A SHOOT"—ONE OF THE PHASES OF THE BATTLE OF CAPE MATAPAN, when British superiority in the air definitely turned the scales at sea for the first time in history—*Drawing by Roland Davies*

At Cape Matapan it was essential that the Italian Fleet be brought to action, despite their great superiority in speed and their determination to use that speed to escape to the safety of their bases. In the Ionian Sea the torpedo-bombers found targets which were capable of manœuvre as they had not been at Taranto. "The function of the bombers in this instance," writes one commentator, "was like that of beaters at a shoot. Their tactics were as new to naval warfare as were the German tactics in Poland, where the aircraft isolated certain centres of control far behind the lines. Obviously, if aircraft are to be used both as beaters to drive the game on to the guns and to worry the fleeing pack, they must be reasonably sure of freedom from interference." This "freedom" was ensured by the manner in which we had established air supremacy over the Italians in the Mediterranean. The enemy paid a terrific price for his lack of aircraft carriers. The tactics employed by our own aircraft in this decisive engagement in harassing and slowing down the enemy are brought out in the drawing above

Drawing by Roland Davies

THE OLD "LINE" IS USELESS: MODERN INFANTRY CAN NO LONGER MAINTAIN A FIXED "LINE OF DEFENCE"

Although a number of far-seeing officers prophesied that mechanisation would decide wars of the future, it has taken eight campaigns—in various parts of Europe—to demonstrate that "lines of defence" no longer matter. So-called "military experts," before the present war, went so far as to say that the attack must muster three men for every man in defence: but the fact is that France was overrun by only a fraction of the numbers held in the Maginot, and other, defensive lines! Here, in a drawing by a "Sphere" artist, is a picture of what war looks like to-day to infantrymen in a trench line. The advancing monster, scorning all ground defences, armoured to the teeth against rifles and hand grenades, and spitting forth fire from every gun, can crash through such puny obstacles as lie in its path without fear and without hesitation. "Static warfare" is no longer practicable under such conditions; and the defence must alter its dispositions and tactics to meet the new conditions imposed by mechanisation carried to the *n*th degree

IS THE TANK IRRESISTIBLE IN WAR?

The Lessons Learnt in the Eight Campaigns of the Present War Now Show Conclusively that Normal Methods of Defence Against Tank Tactics are Useless

—A Special "Sphere" Section

By DONALD COWIE

IS it realised that since the beginning of this war—on land—the *defence* has been uniformly unsuccessful? And, conversely, is it appreciated that wherever they have advanced properly to the *attack*, mechanised columns headed by tanks have been uniformly triumphant? Let us glance at the facts.

So far there have been eight campaigns in this war. First came the German *blitz* against Poland, when masses of tanks quickly shattered masses of cavalry and infantry. The Finns admittedly destroyed many of the shoddy Russian tanks in the next campaign, but even they could not stand on the defensive for long, and eventually had to capitulate. There is no need to recount how the Germans brushed aside opposition in Norway, Holland, Belgium and France.

The Italian mechanised thrust against Greece was a failure, and is the only blemish on this argument. But (1) it was not a proper, mechanised thrust; and (2) the few tanks used were about the world's worst. As soon as the Germans came along with efficient methods and vehicles, the balance was restored.

What happened when we sent our own armoured columns forward in Africa? We enjoyed complete and devastating success—until we stopped, and the Germans sent their armoured columns forward. Finally, we have witnessed the triumph of these again as they have thrust through the Balkans.

What is the lesson of all this? Has the modern armoured fighting vehicle some magical quality, which makes it quite irresistible so long as it is on the move forwards? What can we do about it?

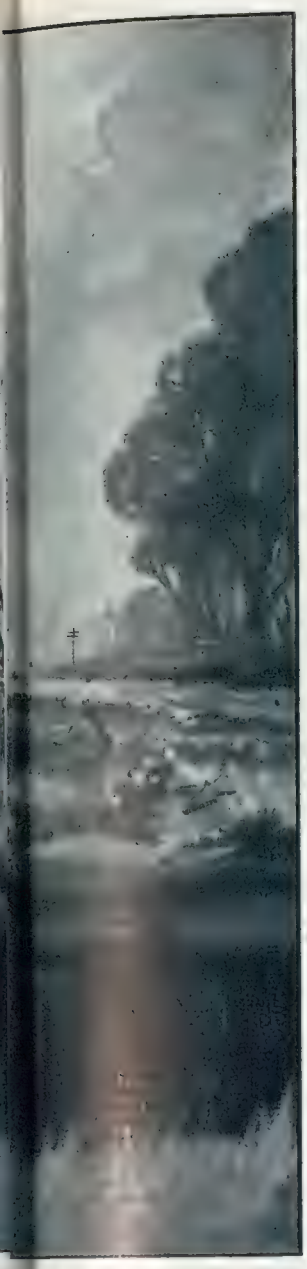
Well, first of all, we must get one or two facts firmly fixed in our minds. Primarily, we must appreciate the remarkable phenomenon—one of the most remarkable in all military history—that a universally-accepted principle of war has been completely upset in a short generation. Only a short time ago some of our most brilliant experts were still expounding that the offensive must be to the defensive as three to one before it could be successful. The next fact to grasp is that practically all the weapons and methods of anti-tank defence devised before this war are completely useless.

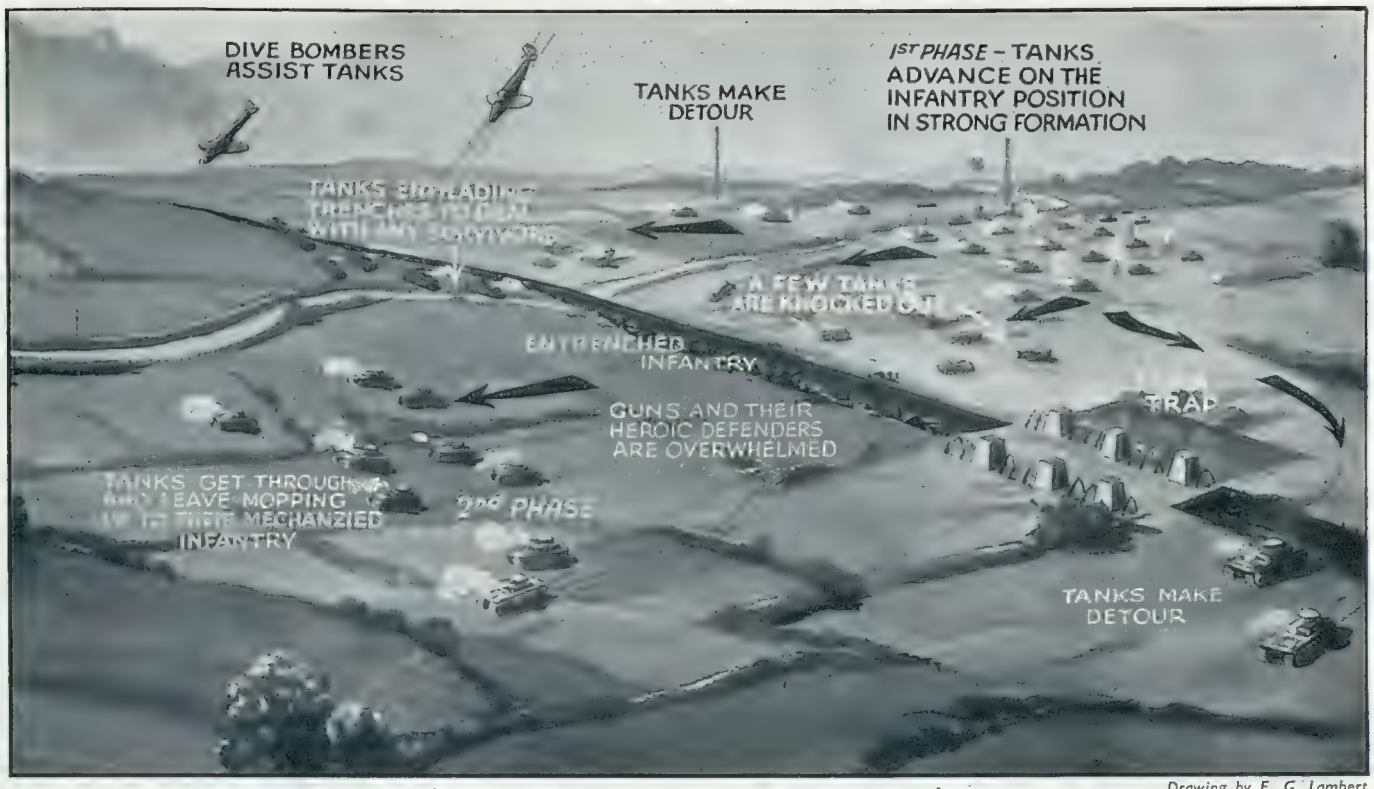
It has been demonstrated time and time again during the last eighteen months that *there is always a way round*. It is not that the anti-tank guns, fortifications, dragons' teeth, road-blocks and cunning traps are ineffective in themselves. But it is always impossible for such defences to cover every square yard of a frontier, a line, or a position. There must be an uncovered weakness somewhere, and the well-managed mechanical spear-head inevitably finds that before long,

The tank is bound to be successful against static defences at present because (1) it has supreme mobility; (2) it can carry very tough armour; and (3) it can itself deliver effective fire, on the run, from all points of the compass. It is fairly evident that a means of paralysing the tank has not yet been found. Therefore modern war, given equality of tank forces, reaches stalemate again. Supposing we build a mechanical army strong enough to face the Germans, and we meet our enemy squarely on the battlefield. First we might tear through their territory, take several towns, and round-up hordes of prisoners. But then they would weave round our columns in turn, cut them off, and regain the territory. Upon which, more of our columns

On right— *Drawing by Roland Davies*

HOW THE "HEAVY-MEDIUM TANK" OF TO-DAY IS ARMED: IT IS REALLY A SMALL FORTRESS ON WHEELS: Unlike a fortress, however, the modern tank possesses the great virtue of mobility. Its heavy-duty caterpillar tractors carry it over most obstacles of terrain, and over a good many artificial obstacles as well. It is so heavily armoured that only special anti-tank guns can bring it to a standstill, or artillery specially trained on its path of approach. The crew of seven operate a surprising number of guns, which are indicated in the drawing. Not only can these fire in an almost complete circle, but they can also be elevated or depressed: it will be noted that, in addition to machine, and other, guns, there is a very heavy gun of 75 mm. calibre—a field artillery piece! Owing to the range and movement of the guns, a tank is more deadly at 200 yards' range than at two. Its speed on the road is 30 m.p.h.





Drawing by E. G. Lambert

THE VULNERABILITY OF THE OLD "LINE"—HOW THE TANK HAS OUT-DATED THE OLD CONCEPTION OF WARFARE

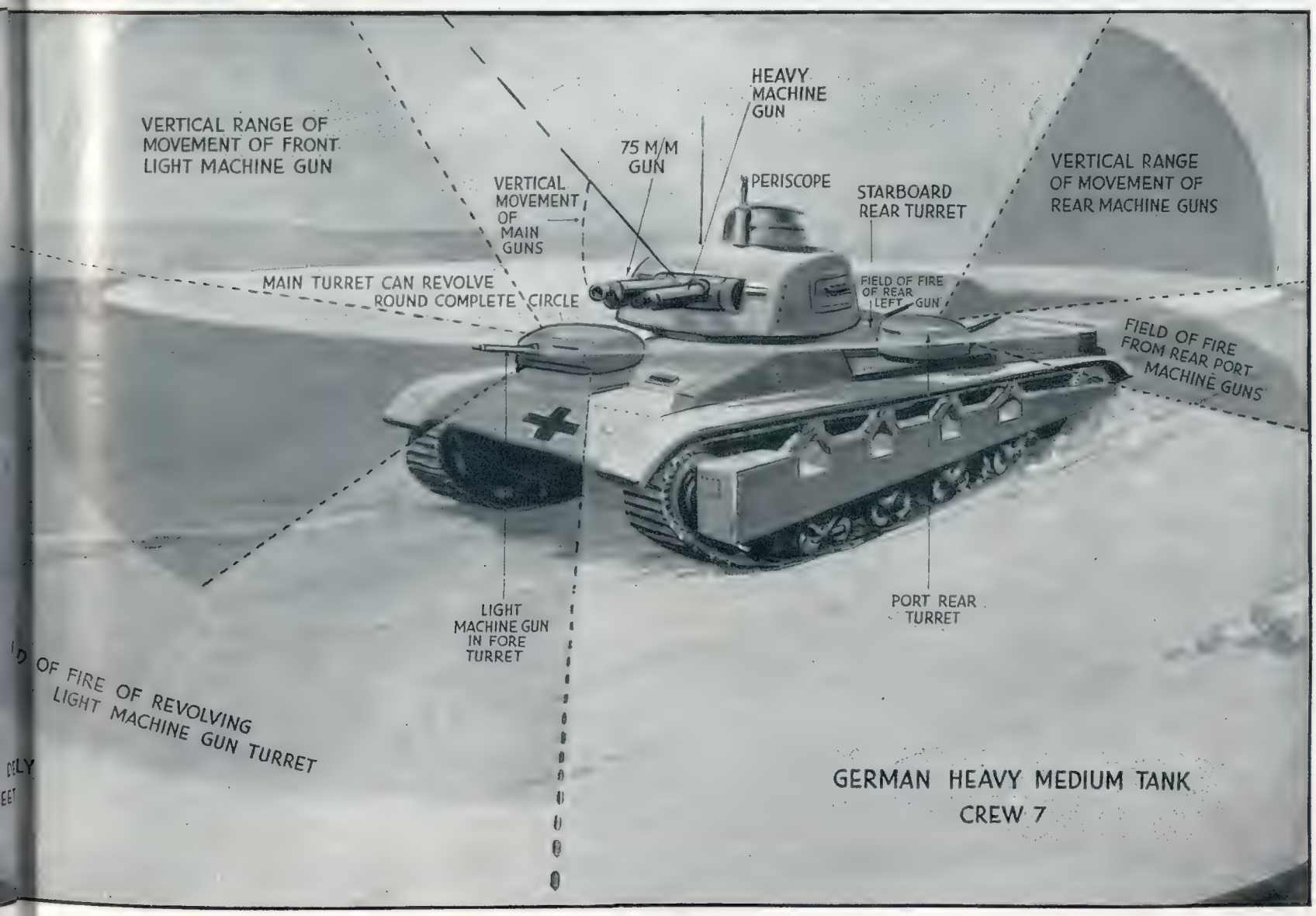
In future combat with the Germans the idea of fixed defences must be abandoned. The advance of armoured divisions immediately renders the fixed trench line untenable: a few tanks may be knocked out, but the main body comes on inexorably, ignoring or avoiding "tank traps" and enfilading the trenches with a devastating fire. Behind the trenches the tanks overwhelm the guns and their heroic defenders—who are virtually fixed to their positions, whilst the attackers can move at great speed—and then pass on, leaving the "mopping-up" to the mechanised infantry following behind the spearhead

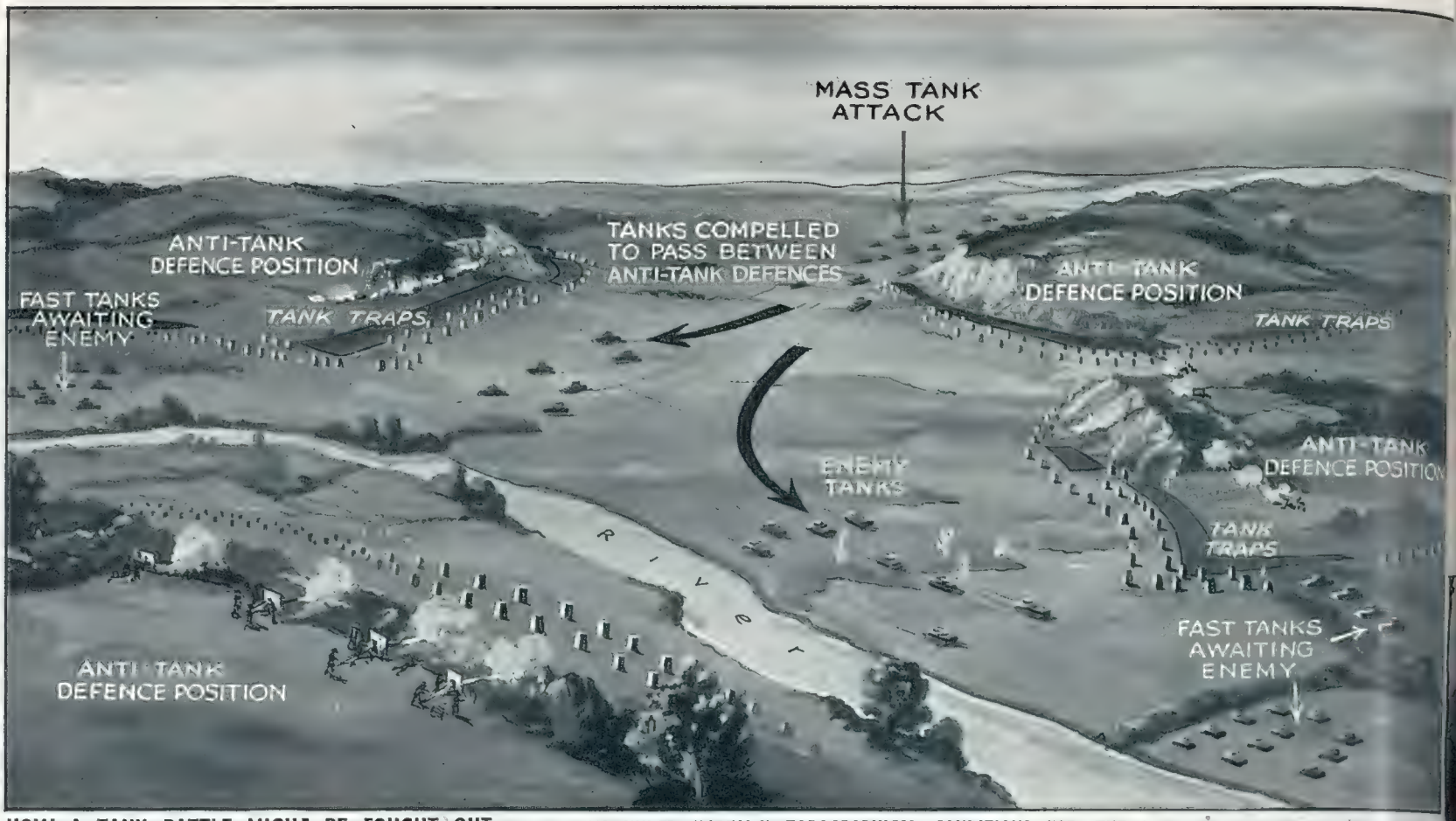
would repeat the process—and so it would continue *ad infinitum*, until such time as the cleverest commander finally prevailed.

Why have the Germans been experimenting so recklessly with parachutists and dive-bombers? The answer is that they have been seeking for a method of ending the *stalemate of the tank*. Perhaps parachutists could help to consolidate a tank-taken position finally. Stukas might possibly prove a means of blunting the mechanical spear-head. But it seems unlikely, on the conclusive data now available, that any means at present being used will suffice to stop or baffle the thrusting columns. Something entirely new will be needed. This will, of course, be discovered eventually, because no weapon lacks an antidote for ever. What can we visualise as a possible antidote to the tank?

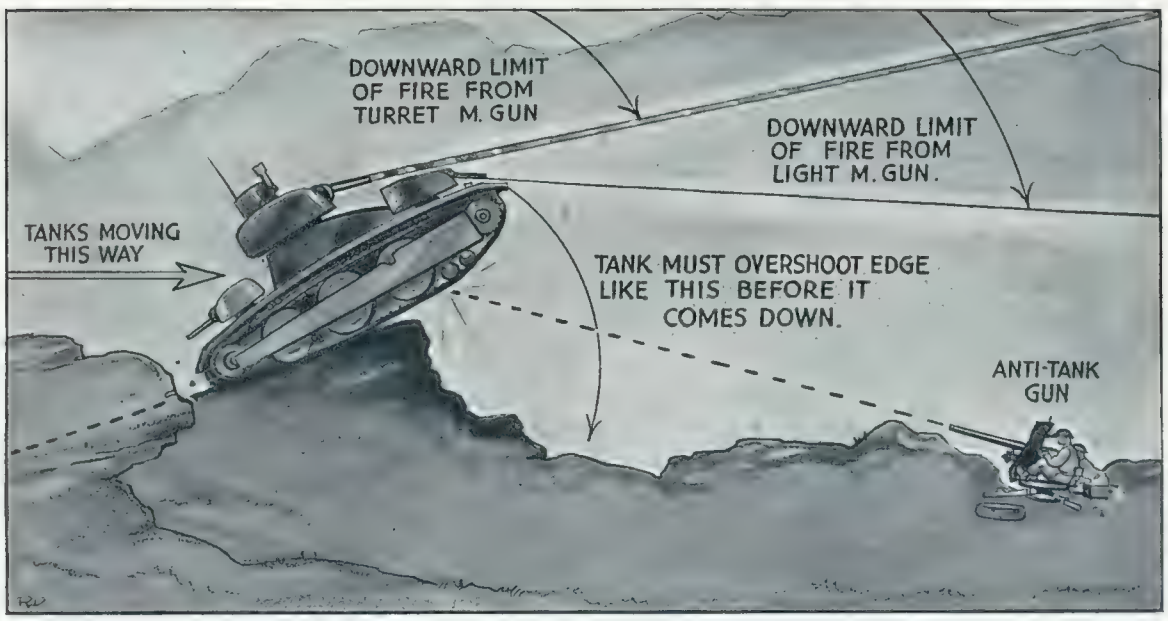
We now enter the realms of fantasy—whence so many practical inventions have, in fact, proceeded. Imagine, for instance, an electric ray which, just touching the outside of a tank, would instantly electrocute the occupants. It is most probable that aircraft will eventually solve the problem, for the simple reason that, as has been demonstrated, no form of static defence seems likely to be effective against monsters that can not only move at 40 miles per hour, but can also move where they like, independent of roads.

Everything at the present time will depend upon the generalship of our armoured commanders. They will have at once to be infinitely daring and infinitely cautious. It will be their brains against those of the enemy. Thus General Wavell drew back carefully in Cyrenaica, held his hand in Greece. When the British columns do thrust forward, they must be sure of thrusting in the right place. There is one happy feature of this remarkable development in military methods. It is perhaps the most humane type of warfare ever evolved—witness the low casualties and huge bags of prisoners that have been a feature of every campaign.



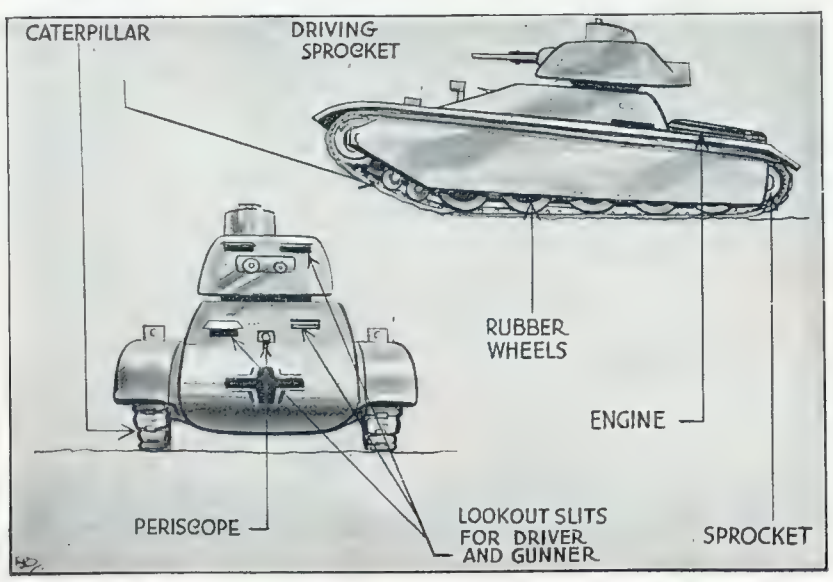


HOW A TANK BATTLE MIGHT BE FOUGHT OUT—**BUT ONLY UNDER "IDEAL" TOPOGRAPHICAL CONDITIONS FOR THE DEFENDING FORCE:** So far, no battle has been fought out strictly on these lines, however!—*Drawing by E. G. Lambert*



ONE POSITION IN WHICH THE TANK IS AT A DEFINITE DISADVANTAGE

It is generally admitted that the tank is most vulnerable from below—if only it can be manœuvred into such a position that attack from this angle is possible! But there are many occasions during its course over broken country when a tank *must* assume a position such as that depicted above. As its nose shoots up into the air, before it can overshoot the edge, its own guns are useless; a well-placed anti-tank gun at this point could rip its shells right through the tank's most vulnerable part. It would seem, therefore, that if a tank can only be manœuvred towards such a specially prepared position, disaster might easily overtake it



Drawings by Roland Davies

THE SIDE AND FRONTAL ASPECTS OF A TYPICAL GERMAN TANK: Incidentally, this drawing also indicates the points of a tank which are most vulnerable to attack. Strip it of its caterpillar tractors, for instance, and it is immobilised; bomb the periscope and look-out slits and it is blinded. The difficulty is to do these things when the monster is advancing at a good speed—and presenting a very small target to the defenders!

Hitherto the Panzer Divisions of Germany have swept all before them, mainly because it has not been possible to prevent them finding some way out when confronted with a strong defence. Their tactics have been to advance until heavy obstacles are encountered—and then to find some way round! If, however, topographical conditions were to be encountered such as those indicated above, it is possible that the first real Battle of the Tanks would be witnessed. The main mass of the enemy tanks, owing to the nature of the surrounding terrain, which consists of precipitous chalky slopes narrowing down to a neck in the hills, are compelled to pass between a series of anti-tank defences which, in turn, are guarded by tank traps which on this occasion cannot be surmounted. On the slopes in the foreground lie the defender's heavy ordnance; and at the two exits from the neck, in the foreground, lie fast tanks belonging to the defenders, awaiting those of the enemy who survive the artillery onslaught as they debouch to right and left. In this case the defender's artillery cannot be directly assaulted by the tanks, because of the wide stream which protects them from close-up attack!

The PROBLEM of DEFENCE

Why Anti-tank Guns are Not Enough in Themselves

THE question must have puzzled many people why, with reports always arriving of enemy vehicles knocked out by our artillery and special anti-tank guns, these weapons have not so far succeeded in stemming a tank advance completely. Indeed, the whole problem of the anti-tank defensive is contained in this matter. It must be understood by us all that there is *no* static defence against the tank. Look at it like this:

You might have 100 pieces of ordnance available to stand in the path of the likely tank advance. To begin with, all the guns would not be of equal value. Ordinary field artillery and howitzers are often chancy weapons when operated through open sights, as they would have to be against charging tanks; they are frequently difficult to manage on rough ground, and shooting against tanks must be very even and "straight-from-the-shoulder." Sometimes they will not have the proper kind of armour-piercing ammunition, and, best of all, the kind of shells that burst devastatingly inside the objective.

Real anti-tank ordnance, like the 2-pounder three-legged gun, and the .55 armour-penetrating rifle, get over those difficulties, yet thousands of them would be needed completely to hold up a tank advance. Why?

Supposing you had those 100 pieces of ordnance available to stand in the path—perhaps under the best conditions of a narrow, rocky defile. On the first tank's or motor-cyclist's appearing, they would open fire, and probably annihilate the first; they might even block the road further with the second and the third and the fourth, and the fifth. Yet the odds are that the sixth would get through.

What we still underrate are not only the speed and toughness of the modern tank, but also its ability to fulfil the earliest function of that vehicle—to become independent of obstacle. I have seen modern tanks climbing sheer hillsides, plunging through rivers, straddling guns, even mounting to victory over the smashed shells of their own companions. So the anti-tank artillery—if there is enough of it—keeps on popping valiantly away, occasionally scoring a direct point-blank hit (which is necessary) and overturning a monster, but inevitably allowing a certain number to pass by unscathed.

It is a fact that under certain circumstances the rate of fire of anti-tank guns is not equal to the speed with which tanks can, despite all obstacles, pass a given point. There is one crux of the matter.

There is another. I mentioned the necessity of having enough anti-tank artillery. I wonder if we have as many guns as the Germans have tanks? Where the ratio of gun to tank should, in my opinion, be at least three to one. There is a good reason for this. Not only have static guns such a disadvantage against smallish, quick-moving, heavily-armoured objects which can choose and re-choose their forwards path, but anti-tank guns particularly, with their vivid flash, make magnificent targets for dive-bombers.

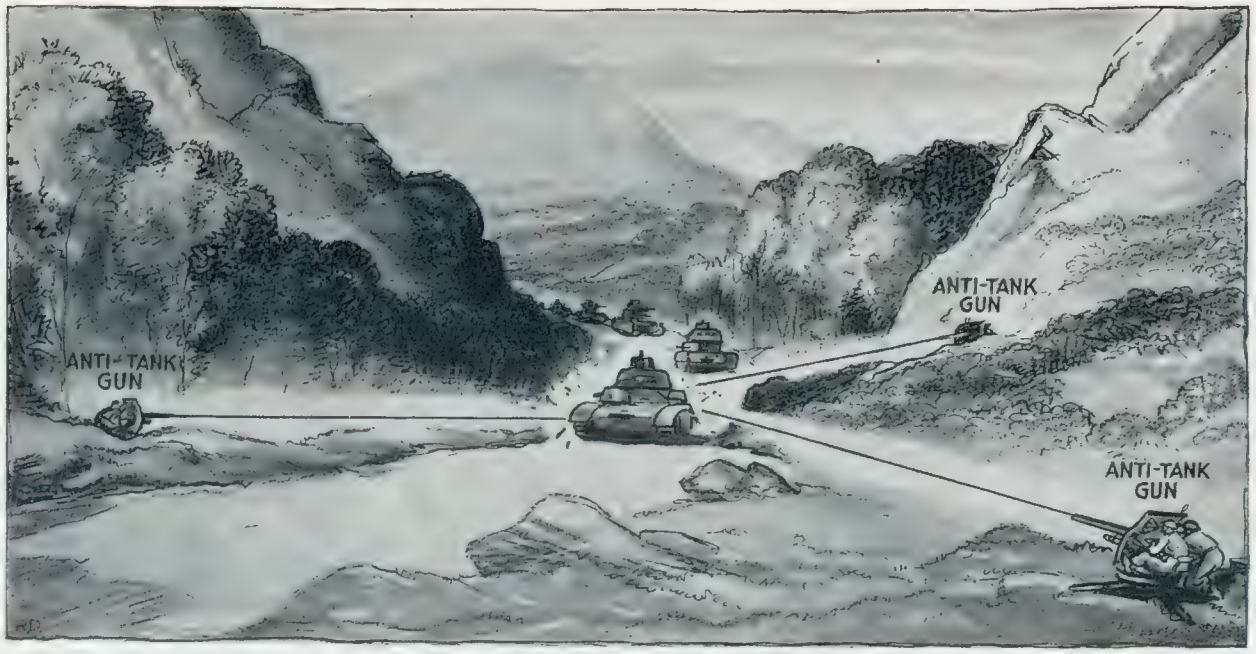
Indeed, one of the most important lessons of the Greek campaign has been that there is no such thing left as an impregnable position. A recent commentator put the matter succinctly, when he stated: "In rugged or fortified country, where accesses are narrow, it is impossible to throw more than a definite weight of ground troops against a nodal point; and even artillery concentration has its limits. But to air pressure there are no limits."

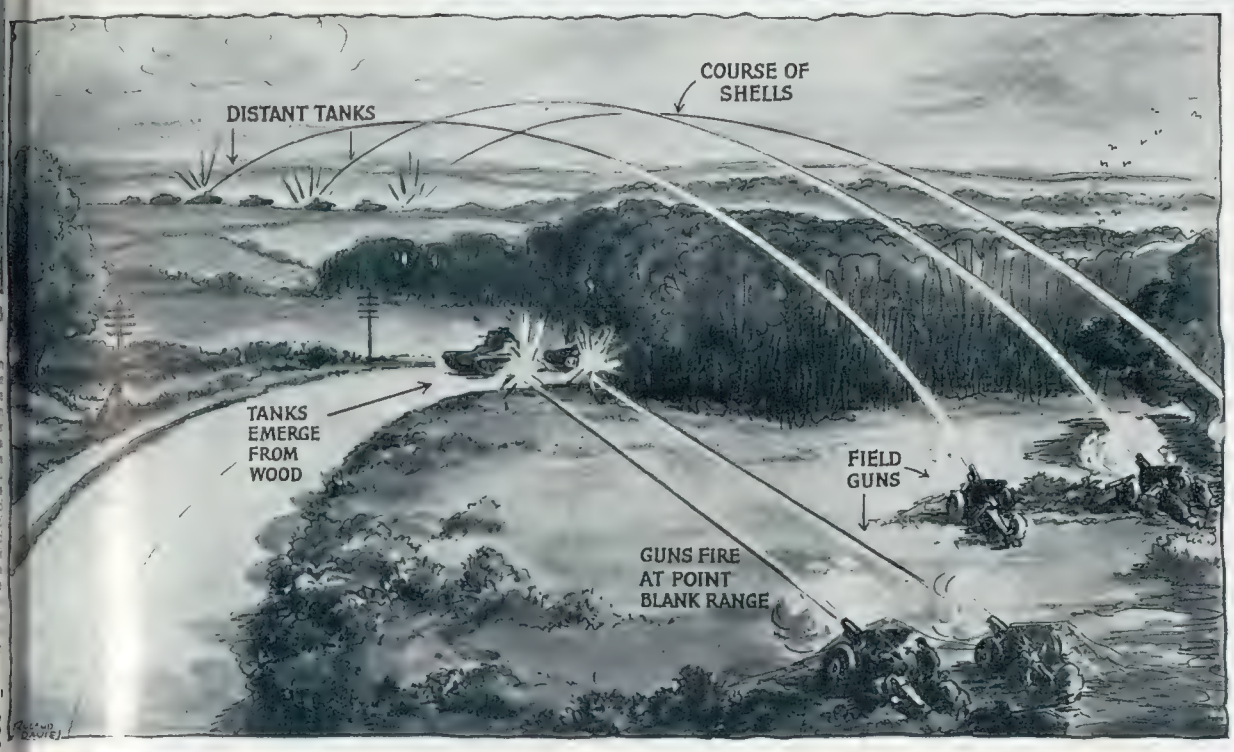
So a first object of the co-operating aircraft with the attacking force is to mop up the anti-tank nests. It is mighty difficult for gunners to take the accurate and steady aim necessary for tank destruction while they are being dive-bombed.

In conclusion, I have been asked by a correspondent the following question: "Imagine some tanks advancing down a country road and over the fields alongside. In front are infantry entrenched. What can they do against the advancing enemy?"

My answer is this: "They can do precious little, and my heart goes out to the poor devils as hapless victims of mistaken strategy. It is my firm opinion that *the only answer to the tank is another one of the same breed, accompanied by at least two more aircraft than the enemy tank has in tow.*"

I do think this—I think and feel it with a great intensity of belief. The only way to win this war is to put our troops in armour and send them forward under a locust-clouded sky. Anything else—while it might win by sheer heroism—is butchery.





ONE WAY TO TRAP A TANK COLUMN IN DIFFICULT COUNTRY: The tanks are here shown coming through a gap in the hills by the only road practicable for them. Three anti-tank guns working as a unit set out to catch the leaders in a cross-fire: if they are successful in putting the leader out of action it is not unlikely that the road will be blocked and the advance held up. If, however, the leader is not caught in this manner he can at once proceed to destroy the guns

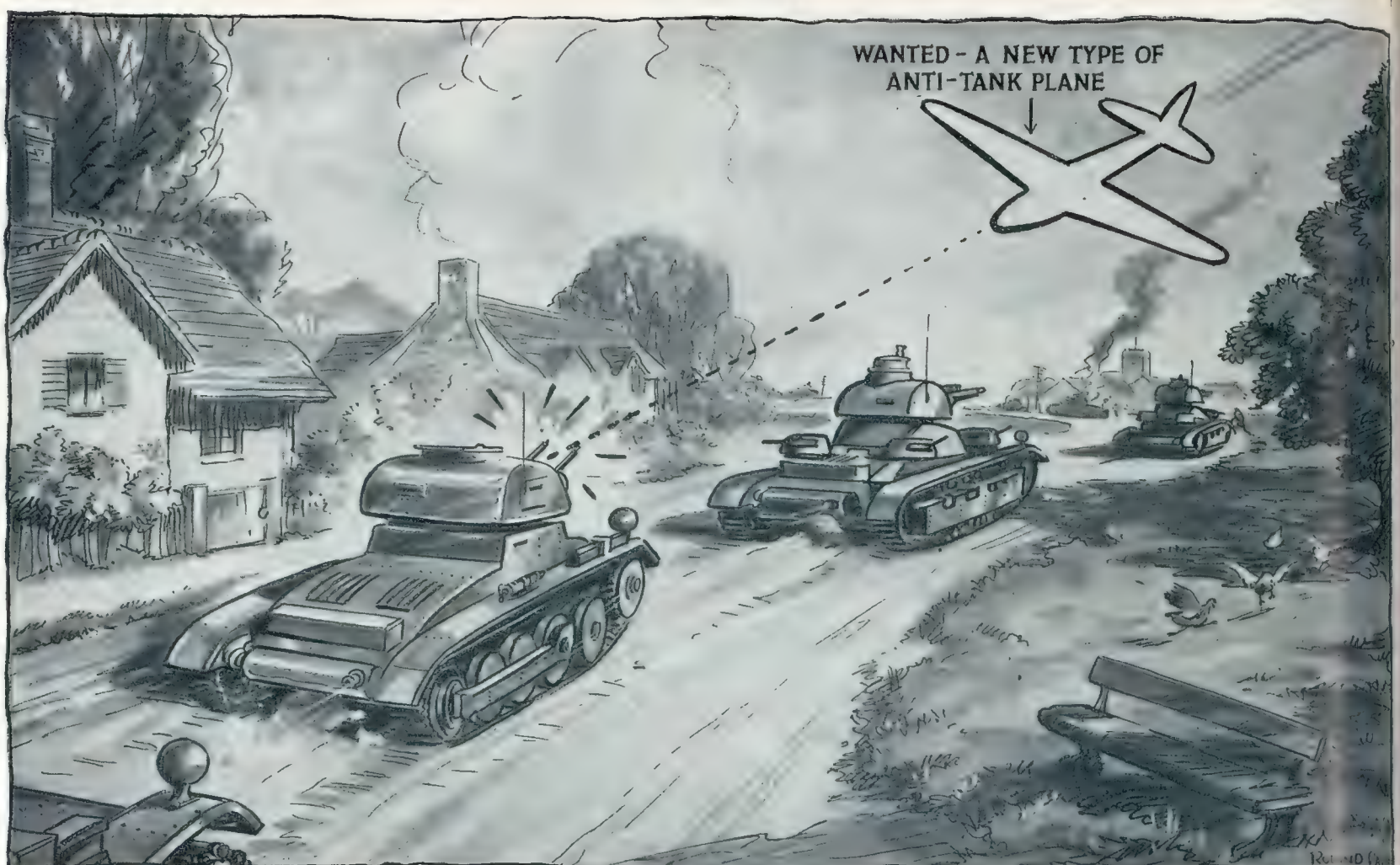
On left—

ACTION BY ARTILLERY AGAINST DISTANT AND CLOSE-UP TANKS: Again we present another method of attack against an enemy tank concentration. In this case land artillery have two targets—first, the big concentration of tanks moving up in the distance, and second, the close-up line emerging from behind the wood in the foreground. By ranging their guns on the point at which the enemy *must* emerge, the defenders stand a good chance of registering telling hits

Drawings by Roland Davies

ARMED MOTOR-CYCLE COMBINATIONS FORM THE SPEARHEAD OF THE GERMAN PANZER DIVISIONS

Throughout their campaign in Holland, Belgium and France the motor-cyclists of the Panzer Division formed the spearhead of the attack after the tanks had blasted a way through for them. But we, too, have not neglected the motor-cycle: some of our units now have Tommy-guns fitted above the handlebars, and these can be fired straight ahead as the machine races along at speed. The Grenadier Guards, famous the world over for their superb fighting qualities, are now equipped in this fashion. And despite all that has so far been written about mechanisation, the fighting qualities of the individual soldier are bound to count in the ultimate analysis



Drawing by Roland Davies

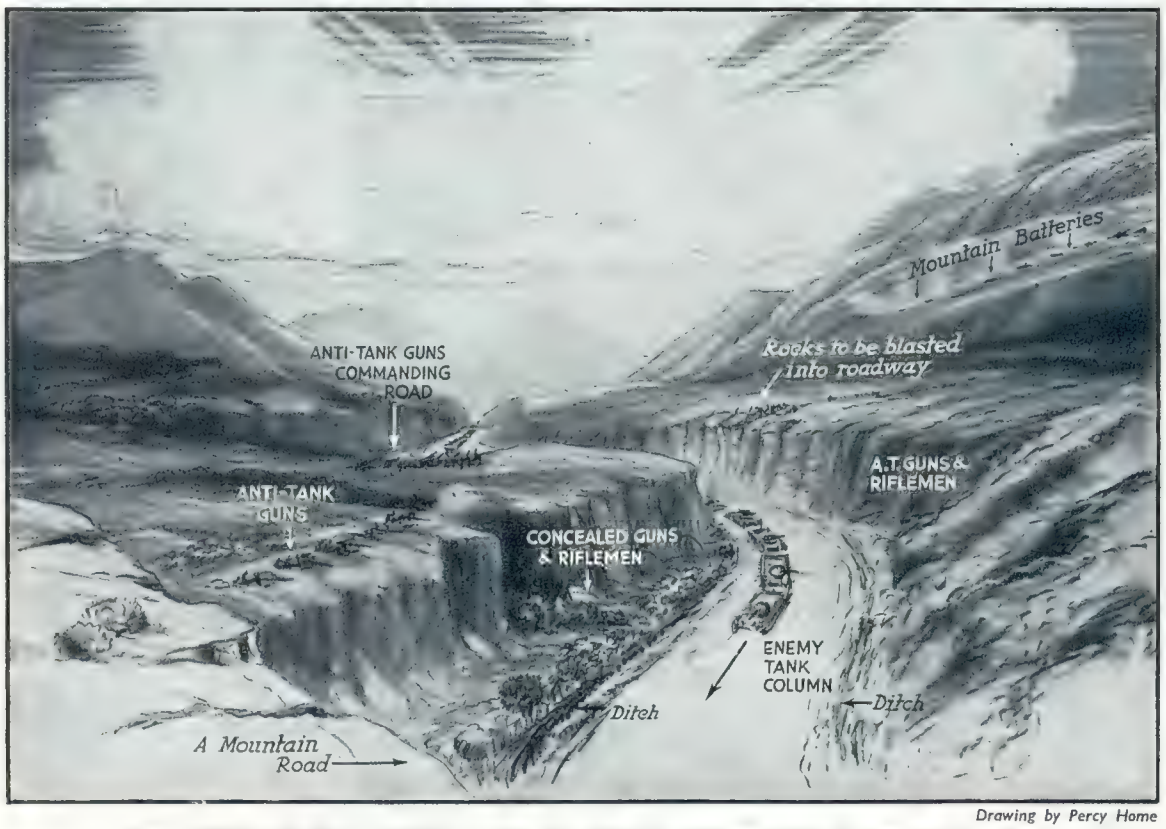
IS THIS THE WEAPON OF THE FUTURE?: CAN THE TANK BE COMBATED BY A SPECIALLY DESIGNED AIRCRAFT, TO COUNTER THIS HIGH SPEED AND MOBILE MENACE WHICH HITHERTO HAS BEEN ENABLED TO OUTMANŒUVRE AND ENCIRCLE THE DEFENDING FORCES?

AIRCRAFT VERSUS TANK

UP to the present, no one special instrument has been discovered which can effectively combat the tank *under all conditions* by limiting its mobility, if not by actually destroying it. From material supplied, however, Mr. Davies has here outlined a suggestion for the employment of a specially designed aircraft for anti-tank attack. The artist has purposely omitted the details of the aircraft, as these would have to be specially planned for the objects in view. The arguments for and against such an anti-tank weapon are outlined below:

FOR.—The tank moves at speed: so does an aeroplane. The mobility of the latter is many times greater, in fact; the aircraft can deliver its attack, and if the first attempt is unsuccessful it can make further attempts; it is difficult to hit by the tank guns because of its greater speed; it need not confine itself to any one tank, but can attack any of them in the column; it can locate its own target within a wide area; it can call other aircraft to its aid; it can attack the head of the column, and thus bar the way to the remainder, or it can come up from the rear; its load of bombs, or its special cannon-shell guns, can be specially adapted for the one function of low-level attack; and—above all—it does not present a "static" defence which the enemy can overwhelm at will.

AGAINST.—The tank—any individual object, in fact—is a difficult target to hit from a fast-moving aircraft; the concentration of fire-power from a line of tanks would be very considerable; after the first attack had been delivered by the aircraft all the guns of the column would be bearing on the attacker; difficulties of terrain—such as wooded stretches along the route of the armoured column—would limit the effectiveness of aircraft attack; heavily armoured tanks, unless hit in a vital spot and in direct fashion (not merely a glancing blow), would be difficult to knock out completely; there could be no hindrance to tank movement and attack by night; climatic conditions might operate adversely against the aircraft whilst the tank would still be free to manœuvre; in the case of a hit, no matter how slight, the aircraft would be put out of action.



Drawing by Percy Home

TANK COMBAT IN HILLY COUNTRY: How the anti-tank defences might be made to function

The whole essence of tank attack is surprise and speed. Yet there must be many moments in modern tank warfare when conditions such as the above are encountered, and when there are no alternative routes for the armoured columns to use. On such occasions, the employment of methods outlined in the drawing might probably meet with considerable success

FIGHTING TANKS in the HILLS

A Note on Possible Anti-Tank Tactics

THERE is one ray of sunshine about tanks—for defenders who do not themselves possess sufficient of the machines constantly to deliver counter-attacks with them (for that is the only certain way of mastering the menace). The greatest enemies of tanks are three: aircraft, water, and mountain ranges. Perhaps we may have all three enemies on our side.

Imagine those German mechanised columns advancing as quickly as possible down the rocky, lowering defiles which are the main roads. On either side of the roads our anti-tank guns can be placed; higher up, the mountain batteries, renowned for their dizzy artillery work, can be waiting; and higher still—well, there have already been messages about Australians planning with dynamite to blast whole cliff-faces down on the imprudent German tentacles.

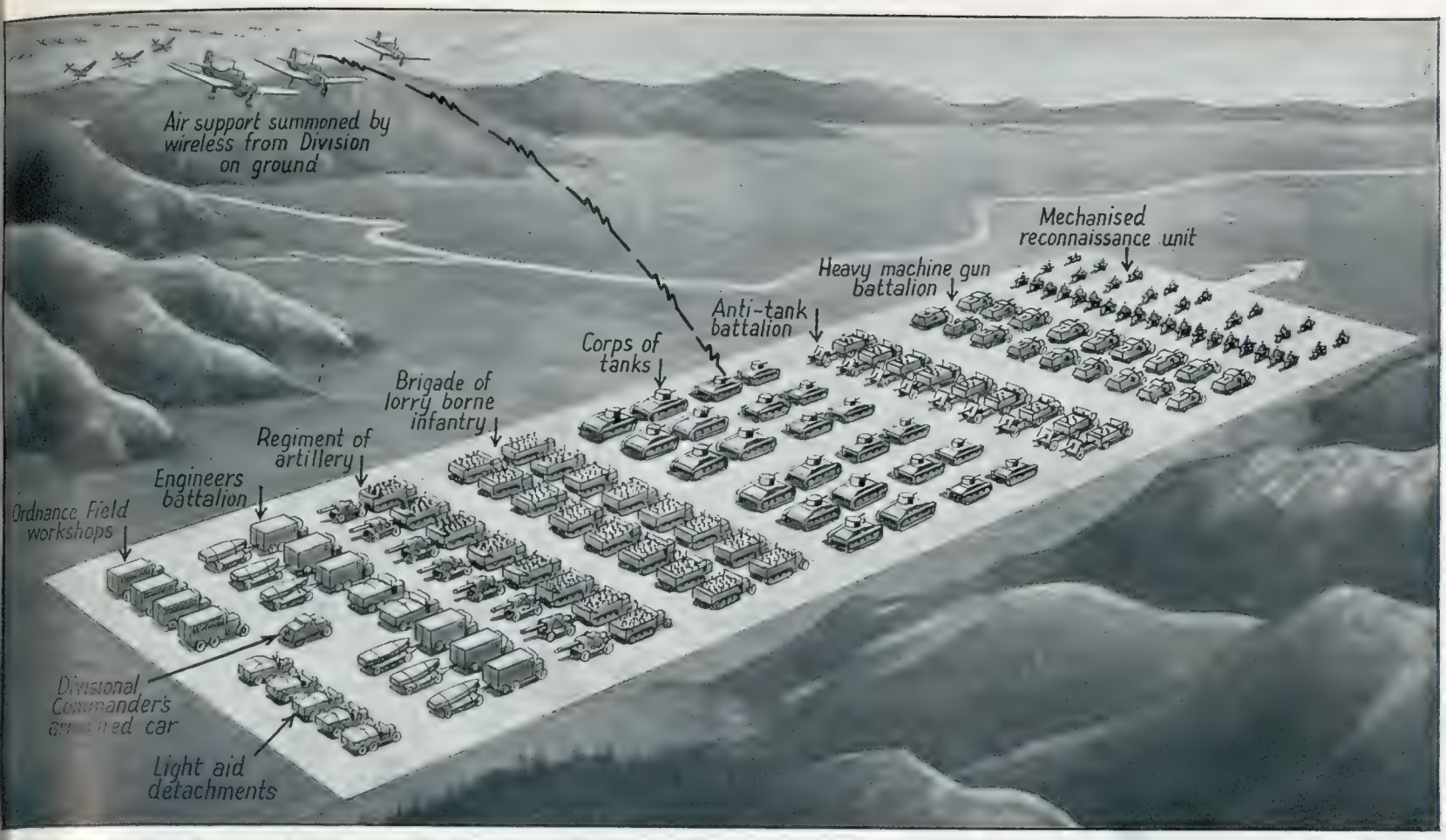
High above all that, however, bombers of the R.A.F. cruise slowly, until, with a zoom and hideous whine, they can descend like eagles to plaster perfect targets in a narrow, terrifying space.

Yes, the defenders have some advantages. But there are qualifications—at least, so far as Greece was concerned.

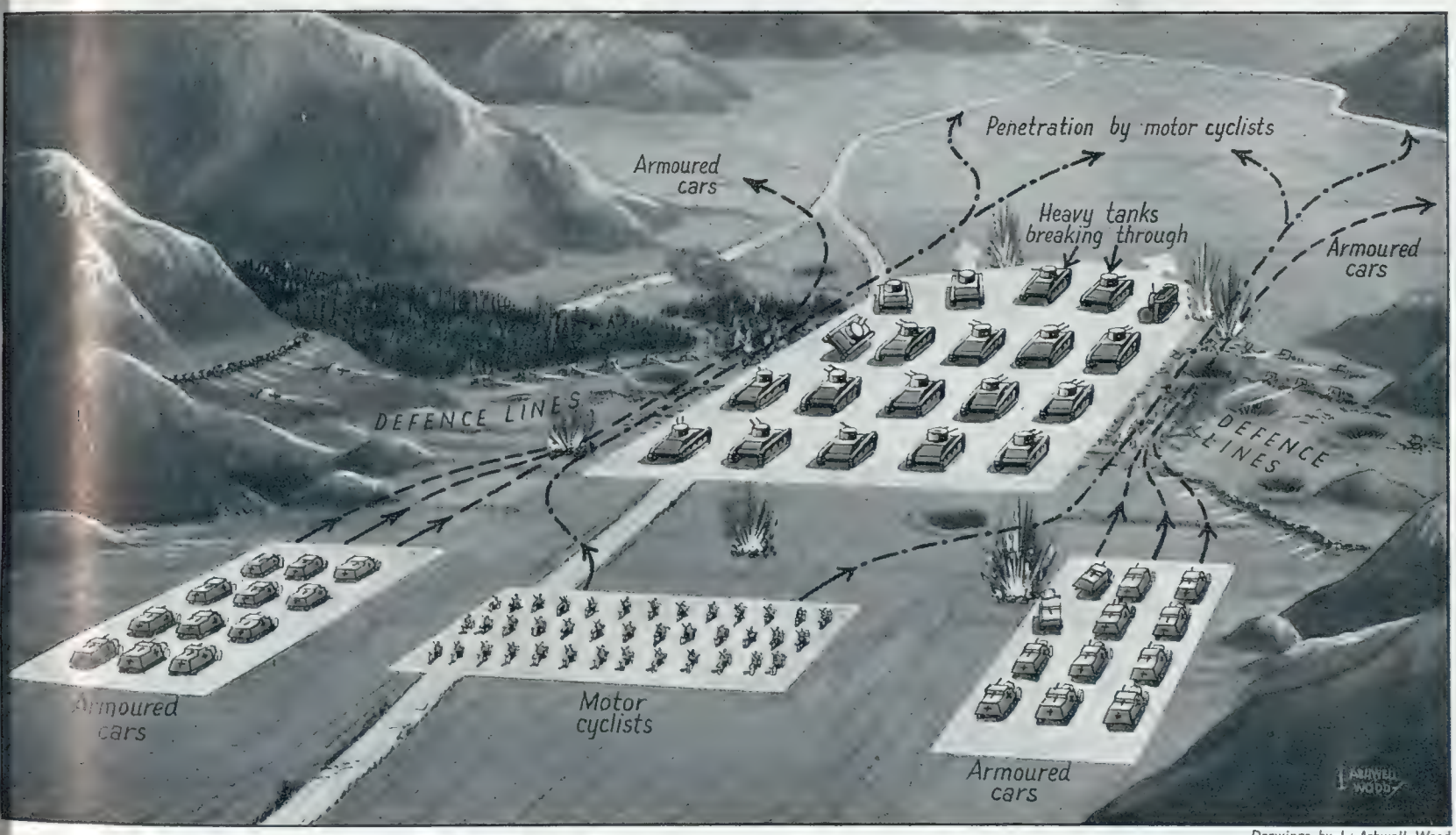
These include the obvious fact (sometimes unregarded by armchair strategists) that *all* the roads leading into central Greece are not rocky, narrow defiles; and the Germans proved adept at finding alternative routes.

There is also the point that motor-cyclists and "suicide-squads" of advance tanks can always be sent forward to "feel" the defences, draw them, and perhaps use up all their boulders and dynamite—until the main body of monsters comes dashing through, and some get through!

Still, there should be scope for clever defensive tactics along narrow roads, not least for defending tanks themselves, who might well be able to advance thunderously, meet the attackers head-on (they would have no room for escape), and cause some valuable traffic-jams.



WHAT IS A "PANZER DIVISION"? HERE IS A PICTORIAL REPRESENTATION OF WHAT THAT TERM CONNOTES in tanks, anti-tank battalions, machine-gun battalions, artillery, field workshops, supporting aircraft and the rest



Drawings by L. Ashwell Wood

AND THIS IS HOW THE DIVISION GOES IN TO ATTACK: At the spearhead are the heavy tanks, after which—when the break-through has been made—come the motor-cyclists and the armoured cars, who then pour through and race on ahead

WHAT IS A "PANZER DIVISION"?

IT is difficult for the majority of us to realise what is implied by this term. Yet a very complete picture has been conveyed by a recent article in *The Times* by its Special Army Correspondent, from which our artist, Mr. Ashwell Wood, has gathered his material for the two drawings above. The Panzer Divisions have been built up, each with its own squadron of supporting aircraft which can be summoned very quickly to its aid: within each Division are a brigade of lorry-borne infantry; a mechanised reconnaissance unit, which, in the form of advance "clouds" of motor-cyclists, played such a prominent part in France; a regiment of field artillery; an anti-tank battalion; a heavy machine-gun battalion; and an engineer battalion carrying bridging equipment; besides a thorough system of ordnance field workshops, with a light aid detachment attached to every tank battalion. The core of this hurtling spearhead is the tank brigade, consisting of two regiments, each of two battalions of 100 light, medium and heavy tanks. The whole organisation, swift and flexible, makes for a high degree of reconnaissance and hitting power under the hand of the foremost leader.

The expert view is that in strategy and tactics the Panzer Division does not depart from the old German doctrine of envelopment, carried out with great speed and striking power by a surprise concentration at the vital point, followed by infiltration. It is extremely strong in reconnaissance employed in finding the weakest spot, and here profitable use is made of the motor-cycle. Once a wedge is driven in, the tanks penetrate as deeply as possible, striking at communications, gun lines, and headquarters; and usually when an obstacle is encountered their flying artillery is within swift call. And some of the tanks are really mobile artillery. It was remarkable in France how they would sometimes put in two or three waves of attacks on a front of no more than 1,500 yards. The heavier tanks went in first against stiff opposition; but when they were through the motor-cyclists and armoured cars would race ahead, leaving chaos and confusion in their trail, while the motorised infantry completed the operation by hunting out resisting nests of machine- or anti-tanks guns. Unlike ours, however, the German tank-gunner is trained only to fire from a stationary position, and here we enjoy a distinct superiority.

The CAPTURE of ASMARA on APRIL 1

And General "Electric Whiskers" in Captivity

ASMARA, APRIL 1: BRITISH AND INDIAN TROOPS IN BREN-GUN CARRIERS ENTER THE ERITREAN CAPITAL AFTER ITS CAPITULATION TO GENERAL PLATT'S FORCES

GENERAL ANNABILE BERGONZOLI, LOOKING VERY FIT, AFTER HE LEFT THE MILITARY HOSPITAL

BRITISH FORCES ENTERING THE DESERTED STREETS OF ASMARA JUST AFTER A HEAVY RAINSTORM. THESE MEN COMPRISE AN INDIAN BATTALION WHICH PARTICIPATED IN THE ADVANCE

THE GENERAL WITH THE BRITISH SISTER WHO NURSED HIM BACK TO HEALTH AFTER HIS CAPTURE

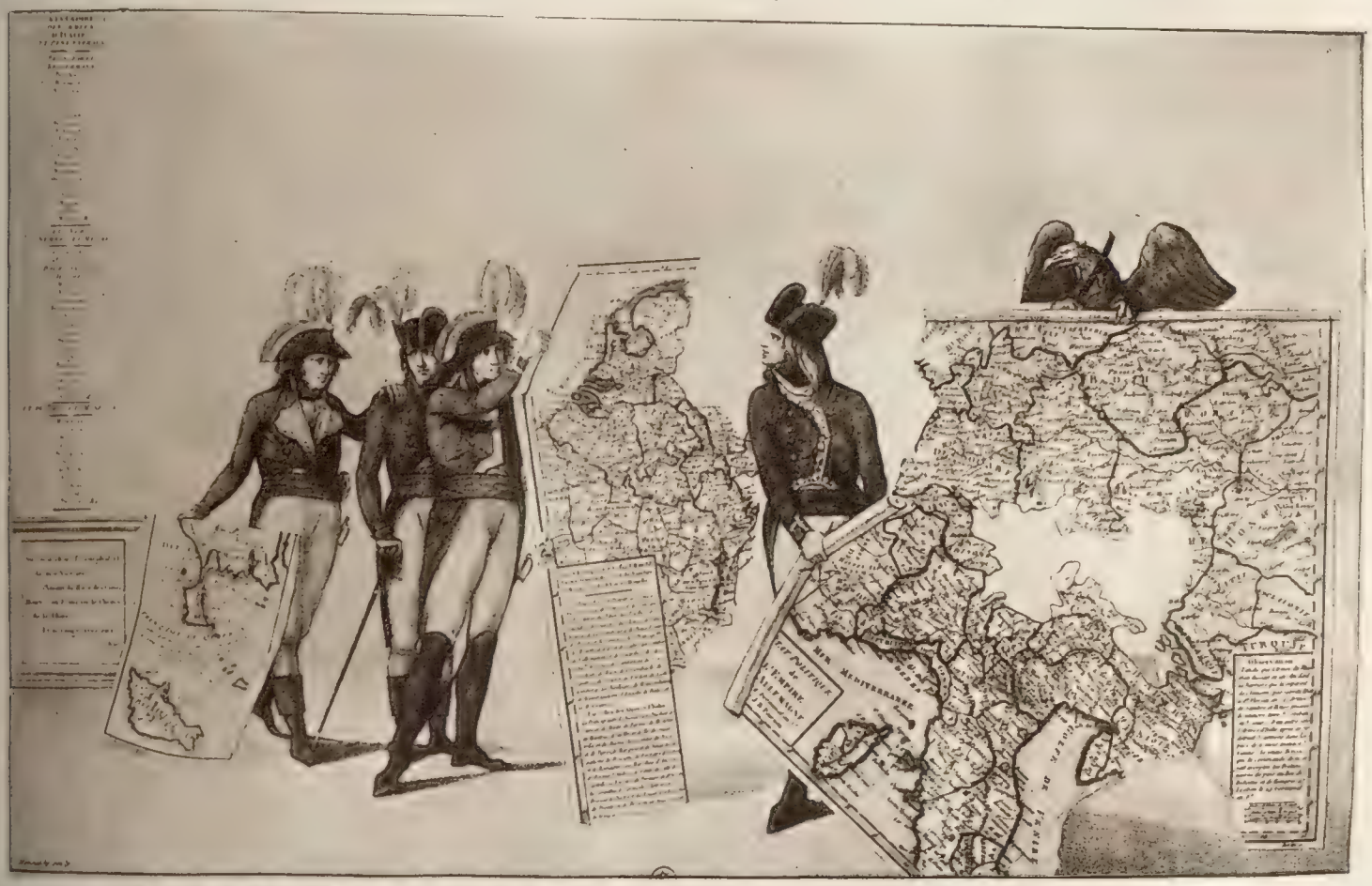
SOME OF THE ITALIAN TOWNSFOLK GATHERED IN ONE OF THE MAIN THOROUGHFARES OF THE ERITREAN CAPITAL TO WITNESS THE PASSAGE OF THE BRITISH TROOPS

On April 1 a six-word communique from Cairo announced that Asmara, capital of Italian Eritrea, had capitulated to General Platt's forces which had advanced there after the fall of Keren. From the latter point, the Imperial forces had made such progress that the enemy everywhere had been taken completely by surprise. So rapid was the advance, in fact, that Italians engaged on the task of destroying roads were taken by surprise, and left their hot meals by the roadside when they attempted to escape. In 48 hours, 800 men fell into British hands to swell the total of 3,775 prisoners previously announced. The pictures reproduced here were taken on April 1 as the victorious British troops were actually moving into the Eritrean capital

ENJOYING A CUP OF TEA AT ELEVEN O'CLOCK IN THE MORNING: General Annabile Bergonzoli, the Italian Commander in Libya, who was captured at Agedabia after he had eluded us at Tobruk and Bardia, has just left the Military Hospital where he has been receiving treatment since his capture. He is now restored to health and full of gratitude for the careful nursing he has received. When the General arrived at the hospital he was in a very weakened condition, and it was suspected that he was suffering from appendicitis. It was found that an operation was unnecessary, and gradually he was nursed back to health. The General is fifty-six, and he has been in the Italian Army for thirty-seven years. In a short interview he said that he had had no leave since 1935, and up to the time of his capture he had been in the Desert for 17 months. Previously he was in Spain. The General was obviously delighted with the treatment he had received in the hospital and expressed his regret at leaving. He had just enjoyed the first rest he had had the opportunity of having for a long time

PARALLELISMS of the EUROPEAN SITUATION

How History Appears to be Repeating Itself as the Struggle with the Present Dictator of Europe Develops: Events of the Days of Nelson and Napoleon Find Their Counterparts in 1941



THIS SYMBOLICAL CARTOON OF THE TEARING UP OF THE MAP OF EUROPE IS PARALLELED BY HITLER TO-DAY: Hitler and his generals have overcome the military power of the countries of Europe, with the exception of Sweden and Spain, which have not so far been attacked. Even Italy is penetrated with a subtle but none the less dangerous strategy and the country is virtually a vassal State. In this picture Napoleon, or, rather, Bonaparte, as he then was, is holding the northern half of Italy in his hand. The other generals represent the victories in the Low Countries, and on the Sambre and the Meuse. "At the gates of Rome you have given peace to Italy: at the gates of Vienna you have given it to Europe" says the fulsome inscription beneath the print

PERHAPS the most outstanding parallelism of the European situation to-day with the state of Europe a hundred and fifty years ago was the overweening desire of Napoleon to invade and conquer this country. The exact moment when this desire became a part of that clever, but treacherous and ruthless brain it is difficult to determine. We know that the scheme was afoot when he was in the earlier stage of his meteoric career. He was still the young and slim general of the French Directory. He doubtless realised at this early stage that England stood in the way of a complete French victory—later he was to feel with biting chagrin that it stood in the way of his immense and soaring ambition. In the year 1798 he paid a visit to the Channel coast at Dunkirk in order to envisage the possibilities of invasion. Although an army had been assembled there since the previous year, and much labour had been expended on the project, he came to the conclusion that it was not feasible until France had gained naval supremacy. He therefore persuaded the Directory to sanction a change of plan, which was to include the conquest of Egypt. That effort ought to have convinced him even more strongly of the power of the British Navy. Yet in 1803, when Emperor, he returned to his great ambition—the invasion of England—and made enormous preparation for the conveyance of a large force to land in England. Thirteen hundred flat-bottomed boats were made to carry the troops, boats which all naval authorities claimed were unseaworthy, and could only be used in a season of absolute calm. The Emperor was at first prepared to send this flotilla without any support at sea, but his naval advisers finally persuaded him that it was impossible.

THE DESIRE TO INVADE ENGLAND: Napoleon prepared boats and ships at the Channel ports, but came to the conclusion that invasion was not practicable

Napoleon then planned that the French Fleet at Toulon and the Spanish Fleet at Cadiz were to escape from the English fleets blockading the ports, to sail to Martinique and land forces to drive out the English who had captured the French island possessions, and then proceed back to the Channel to act as naval protection for the flat-bottomed troop-ships. All this was planned as if naval operations could be carried out to date, as those on land.

Nelson was to be deceived into thinking the French Fleet had gone east, instead of west, but he was, after a short hesitation, convinced that the enemy had gone west and pursued them. In fact, all the detailed schemes to be carried out by Napoleon's Navy failed and no men-of-war appeared in the Channel. Meanwhile, England, finally aroused, had made great exertions, volunteers had offered themselves, and in all parts of the island preparations were made for meeting the enemy.

Napoleon kept his 130,000 men constantly employed in embarking exercises, and is reported to have said, "If I can only be master of the sea for six hours England will cease to exist." He did not get those important six hours, but even if he had succeeded in landing, his conquest of England would have been no easy matter, and it is possible that Napoleon might have met his Waterloo on our southern coasts in 1805 had he ever attained the invasion which he so ardently desired.

As the event proved, Napoleon was never able to use the great flotilla at Boulogne, and was balked of his ambition, as even his genius could not control the wind and the waves.

READING LIKE HITLER: Wellington's Opinion of Napoleon

"Bonaparte's mind was, in its details, low and ungentleman-like"—possibly due "to the narrowness of his early prospects and habits."

"Bonaparte's whole life, civil, political and military, was a fraud. There was not a transaction, great or small, in which lying and fraud were not introduced. . . . Bonaparte's foreign policy was force and menace, aided by fraud and corruption. If the fraud was discovered, force and menace succeeded."

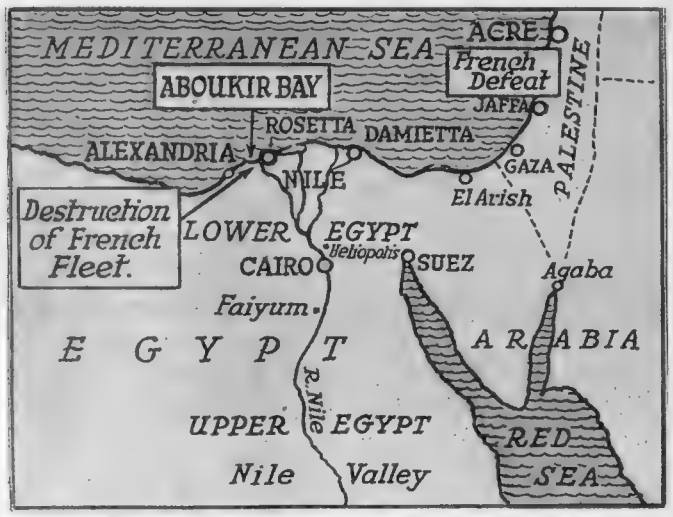
"I never was a believer in him and I always thought that in the long run we should overturn him. He never seemed himself at his ease, and even in the boldest things he did there was always a mixture of apprehension and meanness. I used to call him *Jonathan Wild the Great*, and at each new *coup* he made I used to cry out, 'Well done, Jonathan!'"

From the painting by Maurice Orange

NAPOLEON, STRANDED IN EGYPT, STUDIES ITS ANCIENT HISTORY : General Bonaparte (as Napoleon then was), together with the savants he had brought with him, began an intensive study of the Egypt of the Pharaohs. He is here seen witnessing the unveiling of a mummy at the foot of the Great Pyramids. Military officers and the savants, with white umbrellas, stand nearby

The LURE of EGYPT as a GATEWAY to the EAST

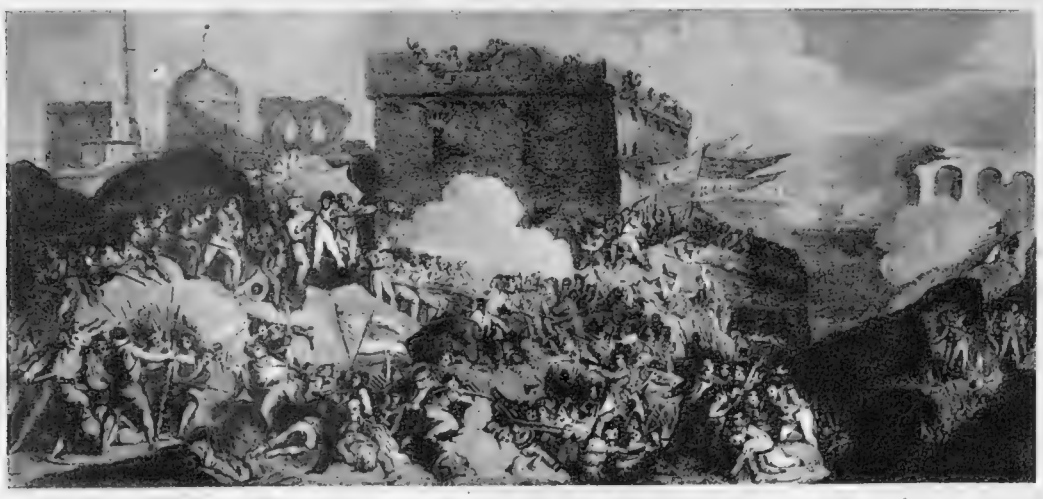
Napoleon, imagining himself a second Alexander, was lured to the Middle East as a prelude to a March of Conquest to India



TWO DEFEATS BRING ABOUT NAPOLEON'S DISCOMFITURE IN EGYPT : First, Nelson's complete destruction of the French Fleet at Aboukir Bay, soon after the expedition had landed, and then defeat at Acre, in Palestine, stopped Napoleon's dream of marching with a self-contained army to India

WHEN Bonaparte, at the age of twenty-nine, was given the command of the Army for the invasion of England, he made a tour along the coast and decided that invasion was impossible without the command of the sea. He thereupon declared that the Army of England should become the Army of the East, and he would go to Egypt. Having gained the permission of the Directory, then governing France, to capture Egypt, and exclude the English "from all their possessions in the East," he set sail from Toulon on May 9, 1798. After capturing Malta and seizing the treasury there, the fleet sailed to Egypt and disembarked at Alexandria on July 1. Cairo was occupied on July 24, and all seemed prospering for Bonaparte, when he heard that Nelson had tracked him down and destroyed his entire fleet in Aboukir Bay. This staggering blow left Bonaparte a prisoner in the conquered province, but when Turkey declared war on France and sent an army, via Syria, to reconquer Egypt, Bonaparte set out to meet it, with the intention of capturing Constantinople and "taking Europe in the rear." Jaffa was captured, and then Acre was attacked, with the usual confidence that nothing so weak could stand against him. But a British squadron, under Sir Sidney Smith, arrived, bringing with them some captured French ships, bearing the siege guns which Bonaparte had sent by sea. These guns were now mounted on the decaying ramparts and used against the French.

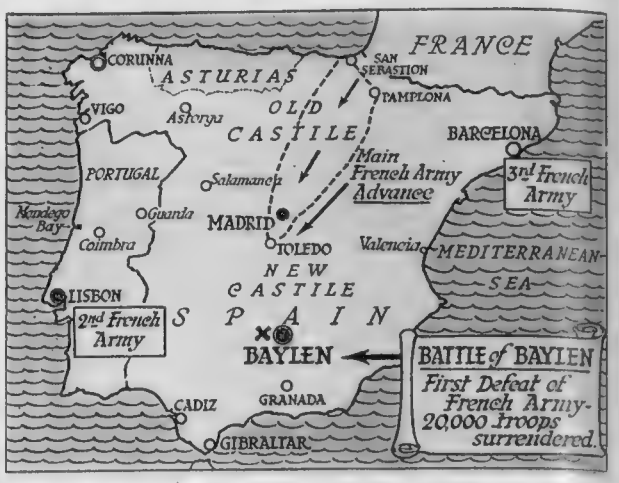
Bonaparte never forgot his failure at Acre, which had broken his record of invincibility and had hindered his golden dream of following the dazzling career of Alexander the Great. Rapidly making arrangements for Kléber to remain in command, and without farewell to the army, Bonaparte took the opportunity of a favourable wind, and slipped away, with some of his most intimate friends, in two frigates. Again his luck held, and after a voyage of over six weeks, he reached France on October 9, 1799, having been unmolested by the English ships which were cruising in the Mediterranean.



From the picture by Sir Robert Porter

ACRE, THE SNAG IN THE PATH OF A GLORIOUS MARCH TO THE EAST : Napoleon, having established military and civil control over Upper Egypt, proposed to march northward and then eastward. Unfortunately, Acre stood in his way, and the resistance which the British forces there put up foiled the grandiose Alexandrine dream. British bluejackets, defending the walls of Acre with the Turks, proved an impassable barrier

PARALLELISMS OF THE



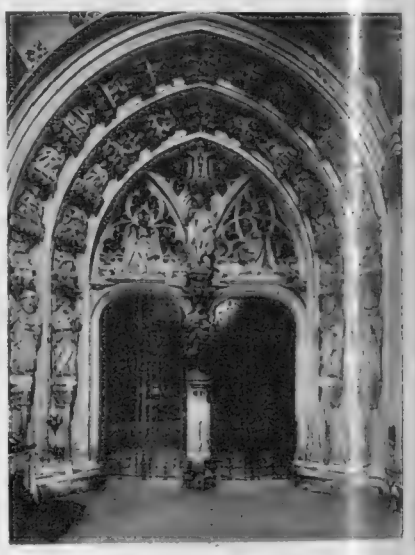
THE SPANISH PROVINCE WHICH DEFIED THE MIGHT OF NAPOLEON, AND THE FIGHT AT BAYLEN : Asturias, the Spanish province which threw down the gauntlet to the French dictator, lies on the northern shore of Spain. Its temerity, of course, drew down on it the wrath of the conqueror, but the effect on Europe was great. The position of Baylen, where the French army met its first defeat, is indicated in the south

DEFIANCE OF NAPOLEON by a SMALL PEOPLE

The Spanish Peninsular campaign revealed a weak spot when the Spanish people, and the Asturias in particular, defied the might of Napoleon

THE glorious distinction of being the first of the peoples to rise belongs to the small province of Asturias in northern Spain which defiantly declared war upon the conqueror of Europe. All Spain was soon aflame, except the north, which was controlled by French armies. Appeals from the Juntas, formed in each province, poured into England asking for help from the country with which Spain had been at war for some years. The help was not refused, and within a few weeks Sir Arthur Wellesley landed in Portugal. But before Wellesley (the future Duke of Wellington) could get to work, a Spanish army had accomplished the almost incredible feat of defeating a French army led by Dupont, who had previously gained a character of great gallantry and dash. Possibly despising the enemy, he had wandered into a trap in southern Spain, and was forced to surrender with 20,000 men at Baylen. All Europe rang with the amazing news, rousing the nations to renewed hope.

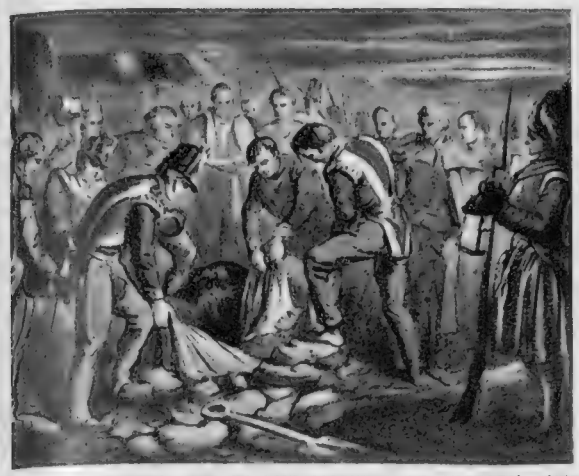
Though it took five long years of patient struggle on Wellington's part, of brilliant victories and equally brilliant retreats, before the French were finally driven out of Spain, it was the general revolt of the Spanish people which lit the torch of national opposition all over Europe and brought about the downfall of Napoleon.



OVIEDO, THE CAPITAL OF THE COURAGEOUS PROVINCE OF ASTURIAS : The little province is mountainous and wealthy in minerals. Its people have a reputation for turbulence. Above is the richly-carved doorway of Oviedo Cathedral

THE RESISTANCE TO THE FRENCH TOOK ON A LOCAL FEROCITY FROM TIME TO TIME : Horace Vernet's drawing of the roof-top fighting in Saragossa during the struggle in 1809 gives an idea of the way in which particular districts took up the fighting. A priest is here seen urging some of the citizens to attack the French troops holding the streets of the city

EUROPEAN SITUATION



SIR JOHN MOORE DIES IN THE MOMENT OF VICTORY OVER THE FRENCH ARMY AT CORUNNA: At the completion of a masterly retreat, forced upon him by inferiority of numbers and ineffectual allies, Moore arrived at Corunna. On January 16, 1809, he turned and defeated the enemy, but died in the hour of victory. He was buried "darkly at dead of night, by the struggling moonbeam's misty light"

A MASTERLY RETREAT IN FACE of ODDS

With limited resources, Sir John Moore made brilliant moves against the French armies in Spain, but was compelled to retire, while turning rearguard actions into victory

LIKE Nelson, Sir John Moore gained immortal fame by dying at the moment of victory. He had been in command of an expeditionary force sent, at their earnest request, to assist the Spaniards against the French. He had been confronted with enormous difficulties from the moment of his arrival. Conditions in Spain were far from satisfactory.

It was mid-winter when the famous retreat began: the cold was intense, the roads were in a terrible condition, and transport was extremely difficult. Under the disappointment of retreat, the severity of the weather, and the lack of food, the discipline of the army broke down, much to Sir John Moore's indignation. Napoleon had left the command to Soult, having learnt news of trouble in Austria. When Corunna was reached on January 11 the bay was empty; no sign of waiting transports. With great calmness Moore re-formed his army, putting it into order and discipline, and turned to face Soult, who had pursued him over the weary, mountainous district. Soult attacked the British forces, but was accorded so severe a beating that he withdrew and made no further attempt to interfere with the embarkation. Sir John Moore was mortally wounded during the battle and was buried on the battlefield during the night.

THE BRITISH COMMANDER AT CORUNNA, SIR JOHN MOORE: Lawrence's portrait of Sir John shows him as a fine-looking man with a somewhat prominent nose. He had endless difficulties with his allies

WHERE THE WELL-KNOWN RETREAT FROM CORUNNA TOOK PLACE: The town and port of Corunna to which Sir John Moore had to lead his undefeated and outnumbered army lies at the north-west corner of the Spanish Peninsula. His men turned and converted a rearguard action into a victory which has passed into history

NAVAL PARALLEL in the MEDITERRANEAN

The crying need of all navies is for cruisers and scouting vessels to keep ceaseless watch on the enemy. A local shortage of cruisers (or frigates as they were in the old days) may give a temporary success to the enemy

CORSICA had been seized at the wish of the islanders, and held against the French, but unfortunately had to be evacuated when France came into alliance with Spain, thus adding the Spanish fleet to their own.

The natural chagrin of the Fleet in being ordered to leave the Mediterranean was transformed into the deepest gratification for, shortly after leaving Gibraltar, the Spanish fleet was sighted and immediately attacked. Jervis, with his gallant Captains, Nelson, Collingwood, and Troubridge, won a signal victory at Cape St. Vincent. For the whole of 1797 the Mediterranean saw no British ships of war.

Bonaparte had planned to leave Toulon on May 14, but was prevented by a severe storm, which also scattered Nelson's watching squadron, and so damaged his flagship that he was forced to take shelter in a Sardinian harbour.

Had Nelson possessed the frigates, he must have gained news of Bonaparte, but the information received only gave the arrival at Malta and subsequent departure.

Nelson adhered to his belief that the French must have gone to Alexandria, and on July 25 once again set off in pursuit, and this time rejoiced in finding the harbour no longer empty. Without hesitation, Nelson attacked at once, and gained so signal a victory that the British Navy reigned triumphant over the Mediterranean for the remainder of the war.

From a painting by F. Butterworth

"GIVE ME MORE FRIGATES": Nelson, owing to unlucky strokes of fortune, was short of frigates, the precursor of the modern cruiser, at a number of critical periods in the Mediterranean. These elegant craft were, of course, the eyes of his fleet. Owing to a great storm, Napoleon eluded Britain's naval forces when he set sail for Egypt

NAPOLEON ESCAPES TO FRANCE: A lucky south-east wind springing up, Napoleon set out for France, and for the whole length of the Mediterranean was in danger of being seized by a British frigate. Yet the commander who was to become the dictator of Europe eluded them all. Horace Vernet pictures Bonaparte being rowed to his vessel

DANGER of CONTACT with RUSSIA

Obsessed with the desire to blockade England by preventing all trade with the Continental nations, Napoleon made great show of friendship towards Russia

NAPOLEON had become dominated by his great scheme for destroying England by making war on her commerce. All Europe under his control was forbidden to have any kind of trade with the enemy he could not conquer by military force. He gained a great adherent to his plan when he met the Czar Alexander on a raft on the River Niemen and the Treaty of Tilsit was arranged.

NAPOLEON INTERVIEWS THE CZAR ALEXANDER ON A SPECIALLY-PREPARED RAFT AT TILSIT: Chafing at the power of Britain to continue the struggle, Napoleon sought for some time to get Russia to conform to his scheme for ruining British trade by compelling all merchants to refrain from having any commercial or financial relations with the hated country. This picture by A. Roehn shows Napoleon standing outside the floating palaquin bearing "Empire" decorations. The Czar, with cocked hat in hand, is standing at the prow of the main craft on the left; in a moment he will have sprung on the floating platform and the interview will have begun. No vision of Moscow on fire seems to have clouded this pleasant afternoon

But five years of the Continental System bore heavily upon Russia, who sorely needed the English goods from which she was debarred. Little by little the Czar was breaking the strict blockade, and showing resistance to Napoleon's domination. This could not be permitted, and without actual declaration of war, the two great Empires met in conflict in the summer of 1812.

Though the Russians lost very heavily, they inflicted deadly blows on the Grande Armée, and they withdrew in good order, leaving the road to Moscow open. With a loss of no fewer than 40,000 men, Napoleon pressed on to Moscow, where he fully expected the Czar would capitulate.

For the first time in his long triumphal career, Napoleon entered a silent city, with no crowds to welcome him. The Russians had deserted their famous city, after destroying all food and military stores. A fire broke out, starting in many places, and the fire-engines were found to be useless. Still Napoleon stayed, waiting for the message from the Czar, which never came. Food supplies ran out, and marauding parties were sent scouring the surrounding country. They had entered Moscow on September 14—a golden autumn period—but the weeks passed and there was no sign of the Russians. At last, on October 18, Napoleon gave the order to retreat to winter quarters in the north, along the route already devastated; but a Russian army blocked the alternative route.

Of the 600,000 splendidly equipped soldiers who had entered Russia, only 20,000 haggard, ragged, and famished men stumbled back across the Niemen. No fewer than 170,000 prisoners had fallen to the Russians, while the rest lay dead, their frozen bodies discovered with the melting snows of spring.

BY AIR TO ICELAND

How Communication by Flying Boat is Maintained between Britain and Iceland under Wartime Conditions

MAJOR-GENERAL H. WILLIAMS, DIRECTOR OF WELFARE TO THE FORCES, VISITING SOLDIERS IN HOSPITAL IN ICELAND: Formerly a Danish possession, Iceland is now occupied by a force of British troops, greatly to the chagrin of the Germans, who saw in it a base for operations against America, North Britain and other vital areas, to say nothing of the Atlantic shipping routes. Communications between Iceland and this country are largely by air during existing war conditions

MAJOR-GENERAL WILLIAMS INSPECTS AN AERODROME SITE DURING HIS VISIT TO ICELAND

DURING THE TRIP TO ICELAND BY FLYING BOAT: These pictures were taken during the course of a visit to Iceland recently by flying boat. Here is a scene in the big aircraft actually during the flight from the mainland. The journey is made in a matter of hours to-day, whereas by small steamer in pre-war days the same passage would have taken days of uncomfortable steaming through rough waters. The winter months in Iceland this year were very severe and conditions could not have been pleasant for the British forces in garrison there

ARMY OFFICERS BEING FERRIED ASHORE AFTER HAVING ARRIVED FROM BRITAIN BY AIR

AIRCRAFT AT ANCHOR IN A SHELTERED ICELANDIC BAY: IN THE FOREGROUND IS A TENDER GOING OUT TO ONE OF THE FLYING BOATS

WOMEN IN BATTLE-DRESS—A FIRST PICTURE

THE FIRST BRITISH WOMEN TO JOIN THE FIGHTING FORCES—and Their Recently Issued Battle-Dress Uniform

Th[illegible]omen are operating predictors at anti-aircraft gun posts, and are working in [illegible]losest co-operation with our fighting forces : they are all members of the Au[illegible]y Territorial Service, and specially picked because of their knowledge of the subjects involved in their particular job. They are the first women to be issued with battle-dress, and this is worn by them when actually on duty at their posts

THE WOMEN REGISTER FOR WORK : A scene at a London Labour Exchange, when the twenty-year-old women registered under Mr. Bevin's new scheme for war work. On the right are the young women being registered ; on the left are the clerks : the procedure is very simple—each woman merely answers a set of questions put to her, and later on she will be informed of the nature of the new duties assigned to her

A.T.S. GIRLS GIVE A CONCERT TO THE TROOPS : The Royal Artillery Depot Concert Party, composed entirely of members of the Garrison, Royal Artillery and Auxiliary Territorial Service girls, have just given the third edition of their own production, "Gunflashes," at Woolwich. The members, who have already made a name for themselves on tour, include many who have had previous experience with dance bands and on the professional stage

THE CROSSING OF THE DANUBE BY THE GERMAN ARMY

Some Important Details in Connection with the German Methods of Bridge-building for Operations in the Field, as Observed in Bulgaria

LONG before their attack on Greece, the Germans had laid their plans for the invasion and overrunning of Bulgaria. The rapid occupation of that country meant that existing bridges across the Danube had to be supplemented by a number of others at strategic points. And it was essential that the bridges should be capable of supporting a very quick passage by large numbers of men and material, lorries and tanks. Accordingly, the engineer corps of the German Army set about the task. From photographic material received in this office Mr. Douglas Macpherson, *The Sphere's* artist, has prepared the three drawings reproduced below to show some of the many interesting points about German bridge-building methods.

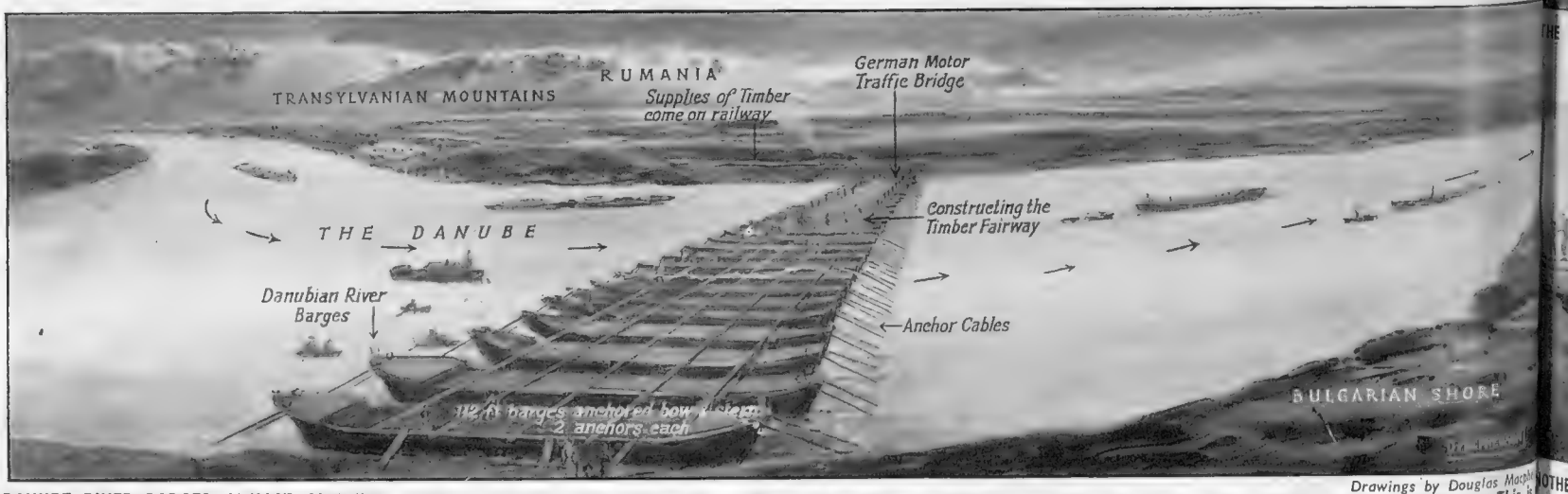
But first let us consider the picture of motor-cyclists below. As our readers know, these mechanised troops usually form the advance guard of the German columns. There are invariably two men mounted on each machine and one in the side-car: each machine requires a space of some three yards: thus, for reconnaissance purposes, a bridge of 1,000 yards in length crowded with a motor-cyclist column means that almost exactly 1,000 men are in passage across it. Multiply the length of the bridge by the length of the column in view on each side of it, and some fairly accurate estimate of the total number of troops involved may be made.

The same process may be followed with lorries and motor-cars. Lorries, in column of route and allowing space for the next vehicle to avoid collision with the one in front, each need 33 ft.: thus, for the same bridge, an observer could report 90 lorries. To estimate the number of vehicles passing a given spot, one could assume the speed of a lorry at roughly, ten miles an hour across a substantially built bridge, and that of a motor-car at 15 miles per hour. If, therefore, a lorry convoy takes 6 minutes to pass your post, 1,600 lorries will have passed.

The two lower pictures show stages in the building of a steel-girdered single-span bridge. The Germans obviously could not use light military pontoons for the crossing of the wide Danube: they commandeered and brought into service some of the very heaviest Danube river barges, whose carrying capacity is not less than 500 tons. The timber employed in this work was scarfed baulks, which argues that, in this case at least, the Germans were pretty hard up for timber.

A MOTORISED COLUMN CROSSES A BRIDGE OVER THE DANUBE: Three men to a machine (two on the motor-cycle and one in the side-car); 3 yards for each team of three—or 1 yard per man. Hence a bridge 1,000 yards long filled with a motor-cyclist column can accommodate 1,000 men at a time—an important point for an observer in making estimates of the enemy's strength when reconnoitring

THIS IS A TYPE OF BRIDGE EMPLOYED BY THE GERMANS FOR THE CROSSING OF THE DANUBE WHEN THEY WERE PUMPING TROOPS INTO BULGARIA: It is, in the opinion of an expert, essentially an obsolete design of a type which was scrapped in the British Army thirty years ago



Drawings by Douglas Macpherson.

DANUBE RIVER BARGES, WHOSE CARRYING CAPACITY IS NOT LESS THAN 500 TONS, HAVE BEEN ANCHORED TO FORM THE BASE FOR THIS FLOATING BRIDGE. This is a temporary and flimsy affair, but a substantial bridge, built with substantial materials, for heavy and continuous use

ROYAL ENGINEERS, OF THE NORTHERN COMMAND, CARRYING A BRIDGING PONTOON DOWN TO THE RIVER. Subsequent stages in the progress of the bridge appear below

A CO-OPERATIVE EFFORT DURING BRIDGING OPERATIONS: Sappers bring up a section of a temporary bridge—sixteen men to one girder

THE PONTOON ARE HAULED INTO MID-STREAM AND WILL SOON BE READY FOR THE ROAD TO BE PLACED INTO POSITION ACROSS THE TOP

ANOTHER TYPE OF BRIDGE—THIS TIME LAID BY INFANTRYMEN FOR THE QUICK PASSAGE OF FOOT TROOPS ACROSS STRETCHES OF WATER

THE BRIDGE COMPLETED, SHOWING HOW IT IS ANCHORED AT THE RIVER'S EDGE, WITH A RAMP LEADING UP TO THE BANK: The above form part of a series of pictures taken during recent Exercises in Bridge-building by Royal Engineers of the Northern Command

ANOTHER TYPE OF BRIDGE, THIS TIME SPANNING A MEDIUM-WIDTH RIVER: The newly-constructed bridge takes the weight of a Bren-gun carrier

LAUNCHING THE FOOTBRIDGE AT THE WATER'S EDGE: THE BRIDGE CONSISTS OF DUCKBOARDS SUPPORTED BY KAPOK FLOATS

THE FINISHED BRIDGE: INFANTRYMEN RACING ACROSS WITH A TOMMY GUN IN THE LEAD: Infantry units of the British Army are being equipped with light, portable foot bridges which enable them to make a speedy crossing of water. These new-type bridges consist of floats filled with kapok to which are fixed wooden duckboards: they are assembled and erected as shown in the above pictures

OTHER THINGS THAN WAR . . .

Shape of Things to Come; Habit Dies Hard; "It's All Done for You"; and A Word on Nue Speling

NO RICH.—However favourably for our cause, however soon, the war ends, we may, as a result of the new Budget and of our knowledge of what this war and the post-war reconstruction will cost, confidently assert that for seven years at the least there will be no rich man in Britain.

The rich man (as wealth was defined in 1939) has ceased to exist. The man with a paper gross income of £70,000 a year (capitalise him at £2,000,000) will continue probably for seven years to pay £65,000 a year in taxation of various kinds, and out of his free £5000 he must keep up his establishments and his inherited White Elephants! So the "millionaire" at least won't be rich. What will a Britain be like in which no single citizen will be able to say: "I have £1000 to play with"?

It is a most interesting problem and far from a cheerless one. But practically none of us can even rough out a sketch of what this tremendous change will imply, because our minds are still attuned to the ancient melodies which have played for so many centuries of our history. There have always been rich men since the Elizabethan age and before it. A single Statute has ended that state of things for a long period to come, and neither rich nor poor can (or at the moment wishes to) estimate what this effect will be on himself, on social life and the welfare of the community at large. We can say with some confidence that a number of men will continue to reap rich profits from business and financial energy, initiative and shrewdness. But not for themselves. They will be the individuals who contribute most to the common purse and to the general welfare, and that will be their reward.

We vaguely realise that a large section of the public who for centuries have depended on rich men for their livelihood will have to be absorbed into State service or set on their own feet, in rural areas. We assume that the great palaces and houses and estates will be deserted; we may hope that those of chief historic interest or architectural merit may somehow be preserved, perhaps on the lines of the French model, as museums, with the ancient owners as custodians and trustee-tenants.

Then, a larger, constitutional problem presents itself. There will no longer be a "buffer state" of a wealthy aristocracy between the Throne and the people. There will be the majesty and dignity of the Throne as a single pinnacle in a level plain of common and healthy poverty. That fact must have most interesting consequences affecting the present usage in the bestowal of honours and hereditary titles and in the holding of hereditary offices. These are no doubt isolated instances which come to mind, and of no great importance. The big things, so utterly vague in shape, so little estimable, are the effect of this violent change on the general welfare, on the face of the country, on industry and cities, on human health and happiness and on national strength.

What wonderful, untrodden ways lie beyond us (for those of us who survive this war), who only in 1939 thought that there was nothing new to learn of this old world, no fresh surprises, no more pioneering before us. How little we know! And oh! how little we knew!

Habit Dies Hard.—It is, if you think about it at this time of supreme crisis, an inexplicable puzzle that so many minds in this country should still be so firmly rooted in the worn-out soil of past tradition. As I noted recently, it seems queer that, with the present acute shortage of newspaper space, a great daily should still find space for a recital of the birthdays of totally unimportant members of the peerage and "little Honourable Misters," as Byron once called them. It is queer (and sad) that in what started as the perfect democratic example of a defence force—the Home Guard—at this hour the newspapers' chief interest is to extract the names of Viscounts (and upwards) who have received in it brand-new commissions as Lieut.-Colonels or Colonels.

Indeed, the higher commands in that Force, as quoted, read like a list of "Among others we noted" at a "drum" at Stafford House in Edwardian days. We may all be fighting with heart and hand for Britain, but it cannot be said that we are all fighting for democratic ideals.

A RAY OF SUNSHINE ON A CLOUDY SPRING DAY BEAUTIFIES THE LITTLE VILLAGE OF WORLINGTON, NEAR BURY ST. EDMUNDS, SUFFOLK

"It's All Done for You."—Looking back on fifty-odd years of life and drawing on the experience of those years, I came the other day to a comforting conclusion. The "great adventures" of every man's life and the achievements, big or small, of individual careers are in a different category to humdrum, everyday doings and tasks. Among the "great adventures" of a man's life are his birth (of which he is unconscious), his first launching out in the world (when he goes to school), his marriage, parenthood, grave illnesses, periods of grave danger in war or accidents, and, no doubt, death. The achievements of his career are the high-water marks of his progress in his craft or profession. It is my conviction that in these matters he plays no lone hand: it is largely "done for him" by the unseen agents of his Providence.

Most, if not all, of his "great adventures" of human existence a man anticipates with dread—marriage, severe illness, his conduct in battle and danger, death. But when he looks back on such of those milestones which are behind him, he sees that none of them was as terrible as he painted them. A man can only speak from his own experience. I found these things true of my own "great adventures." And in my own craft of writing I found it true also. It was not until a book was published that I was able to discern, like a critic of another man's book, a constructive design in that book, a definite pattern worked out. It is not humility but the bald and logical results of experience which convince me that that pattern was shaped by some benevolent agent outside myself, while I worked merely as an amanuensis or automaton.

And so, greatest comfort of all, I pin my faith on past experience that in the last and greatest adventure of all, death, it will be "all done *for* me," and that bogy will be robbed of its terrors also.

Public Schools.—I have felt for many years that the public schools, by clinging too long to outworn traditions, were heading for financial disaster. The demand for a Royal Commission to consider State aid for public schools was proof that a proportion of the Governing Bodies and headmasters are now well aware of the dangers which be ahead. Naturally, the danger appears most imminent to those whose school endowments are weakest, and whose popularity with the wealthier class of parents—if such there be to-day—is least.

The Headmasters' Conference last summer set up a provisional committee of Governors and headmasters (equally *pro* and *con* the idea of State aid) to watch developments. This committee is not regarded as representative by the Provost of Eton, the chairman of the Sherborne Governors, and others. Whether an ideally representative committee, with wide authority among public schools, could be secured in wartime is doubtful. Lord Quickswood (Lord Hugh Cecil) thinks not, and with his view I agree. There is at present no hope of securing a clear policy of reform which a majority would embrace. The public schools are in the position of Balkan States against the pressure of the Hitler of economic stringency. Each still thinks for itself, does not know yet what may be good for it, and is not yet capable of taking the long view or, broadly, of co-operating.

Meanwhile, terrible harm is done to the name and fame of the public school by such (doubtlessly well-intentioned) Press reports as the following: "An official of the Board of Education admitted that some Governors and headmasters of public schools did not care for the condition which State aid would impose: the admittance of a number of poor but brilliant boys to the public schools." No official of the B. of E. should have said it, if indeed he did say it. And I think no Governor or headmaster worth his salt and fulfilling his trust would express in words such a sentiment, even if he held it.

Simplified Spelling.—Kan yue spel? Kan yiu spel? What did Mr. Churchill say in 1940? He said: "If we fael dhen dhe hoel wurld, inkloeding dhe Uenieted Staets and aul dhat we have loen and kaerd for, will sink into dhe abis of a nue dark aej. . . ." It is suggested that Mr. Churchill would never have had to speak in those terms if only we had taken the golden opportunity which offered at the end of the last war, when practically all European States were adopting English in their schools as the first optional language. English as a "common language" failed solely because of our extraordinary inconsistences and absurdities of spelling, and so the non-existence of a common tongue, by which the peoples of Europe could communicate *inter se*, led us to our present tragic state.

LATE AFTERNOON SUNSHINE: A PEACEFUL SCENE AT COCKFIELD IN SUFFOLK: Mr. Douglas Went, the well-known Essex photographer, who took these two pictures, writes that he had been some 50 miles into Suffolk on important work "on a sunny day with lovely clouds. It seemed impossible in the midst of such peace and beauty that we were fighting for the very existence of such a life as this"

I take these statements from a pamphlet which has reached me from Walton-on-Thames. At first I thought that it was sent in response to something I had written about the failure of certain eminent men to spell English correctly. But (it turned out) it was a commentary on another reference I had made—to the absence to-day of any common language in diplomacy and international relations. I read the pamphlet. I can't say that it converted me to the nue speling, though it confirms my opinion of the absurdity of a language of which the five vowels can be pronounced in fifteen ways. But it seemed to me that the systematic, the natural and the scientific versions of the nue speling merely substitute a barricade for a thorn fence. But, as you know, I am something of an old stager. It is otherwise with Mr. Bernard Shaw.

J. G.

AFTER THE BOMB RAIDS

The Spirit of the People—and their Humour—is Unbroken

SHOT TO PIECES IN THE AIR BY OUR FIGHTERS: All that remains of a Nazi bomber shot to pieces in mid-air. Wreckage from this plane crashed over a wide area, and pieces were soon picked off it by souvenir hunters. The crew of three had baled out before the crash, but the parachute of one of them failed to open

UNDAUNTED YOUTH MAKES A PLAYGROUND OUT OF THE SHELL CRATERS: This picture was taken at Bristol, a city which has undergone a great deal of bombing but the inhabitants of which are still undaunted. The youth of the city spend much of their time in improvising playing fields out of the shell craters

HOW TO CONDUCT YOUR BUSINESS DURING WARTIME: Air raids or no air raids, business must go on. This large car now stands outside the ruined offices of a London engineering firm, and in his new "Head Office" the Managing Director calmly carries on with his secretary and his correspondence

THE SPIRIT THE NAZIS CANNOT BEAT: A typical example of London Cockney humour after an air raid in East London. The door-knocker has been salvaged from the wreck, and all callers are informed that "This Time it 's Real"; over the door-frame is another song-title, "Thanks for the Memory." East London has suffered much of the bombing; but the morale of the East Enders still remains unshaken

IN PLYMOUTH AFTER THE "BLITZ": Shopgirls help to salvage jars of jam—part of the stock of a local store damaged during a raid

A NEW "STAND" FOR CARPETS: As the air-raid shelter obscures the view of the windows of the carpet-shop on the left, the proprietor has hung his wares on the walls of the shelter, and customers can thus stop and inspect them in the street. Over each carpet the enterprising shopkeeper has hung cards to commemorate British victories, such as "Keren," "Agordat," "Berbera," and others

CIVILIANS CAN NOW SEND LETTERS BY PIGEON-POST : The first civilian pigeon-post has just been started in Britain by permission of the Air Ministry and Home Office. It will function if other means of communication are disrupted. The first flight took place a few days ago from Fort Dunlop to Wardington, near Banbury, a distance of 40 miles. Birds carried a message from Dunlop workers to their chairman, Sir George Beharrel, and a copy in facsimile of *The Battle of Britain*. There are fifty birds ready to be used, and they can cover a mile a minute in favourable weather. Here the birds are being released at Fort Dunlop at the start of their flight

A BUYER AT THE ROTTEN ROW DUMP INSPECTS SALVAGED RADIATORS NOW UP FOR SALE : Rotten Row, for years renowned as a riding ground for London society, is now a path to one of the strangest "bargain basements" in the world—a store set up by two Civil Servants to sell furniture and fittings from bombed-out homes. This Hyde Park store, which actually fronts on to the Row, has two men in charge—a superintendent and a clerk : both are "salesmen" for the first time in their lives. At this huge dump, the largest in Britain, one can buy a bath or a basin in good condition for 10s. Most of the prices are fixed by the Ministry of Home Security and by building experts from the Ministry of Works and Buildings

ART STUDENTS STILL CARRY ON THEIR STUDIES : Art students who are now engaged on war work find relaxation at the School of Miss Margaret Frobisher, the animal painter, at Bushey, Herts. An R.A.F. Flight Lieutenant who spends his leave at the school is here seen holding a carrot suspended from a pole as an inducement to Johnnie, the fifteen-year-old horse, to pose properly

IN times of stress like these, memory appears to play strange tricks. What a long, long time ago it seems, for instance, when Mr. Neville Chamberlain announced the declaration of war. From what almost incredibly bygone times do we recall the stuff in the newspapers about "the phoney war" and the *sitzkrieg* ?

It is with something of a jolt that Mr. Charles Graves reminds us in his prologue to THE THIN BLUE LINE (Hutchinson. 5s.) that it was not until nearly four months after the outbreak of war that the aircraft of either side made any effort to attack an inland target. Even then it was an isolated incident of a Heinkel, whose pilot was quite possibly exceeding his orders, who opened fire on a number of French peasants working in a field near Villeneuve. It seems also incredible that during that period a number of Wellingtons, finding some German warships within three miles of the coast, were not allowed to attack, subjected though they were to violent anti-aircraft fire. It was not until May 10, 1940, that British squadrons went into the offensive for the first time, and that "the pitiful thinness of our fighters made itself really felt."

There is nothing to be added to the Prime Minister's famous words on this subject, when summing up the Battle of Britain. The story of that battle has now passed into history. That it was fought and won by so few, spurred the so many, who owed them so much, to an immense effort, with the result that the enemy at this stage of the war does not lightly attack these islands, in daylight at least.

That the R.A.F. has outfought the *Luftwaffe* in the battlefields of the skies is a story which will be told often enough, and probably not too often. That its ever-growing strength and continued superiority is due to a system of organisation, training and selection is the story which in this book Mr. Charles Graves sets out to tell.

He has chosen to make a real story of it. Technically it is fiction, since the seven young men between the ages of eighteen and twenty-five, to whom he gives attractive names and realistic personalities, are his own invention. But from that point the story ceases to be fiction, for these seven youths are a typical cross-section of the personnel who were being taken into the R.A.F. in the early days of the war, and who are now fighting in the front line in the various theatres of war. They joined as A.C.IIs, that is to say, on the lowest rung of the ladder in the Service. Most of them became commissioned officers, with the exception of the Scottish boy, who deliberately chose to be a sergeant pilot. One of them was an American, another an Argentine of Irish extraction, one had been in the Merchant Navy, and another had been a schoolmaster.

Step by step Mr. Graves' lively tale takes them through their training, and builds up a complete picture of the various stages of training undergone by those who are chosen to pilot our operational aircraft. But the author would not be the good journalist he is if he neglected their relaxations and recreations. On this point Mr. Graves lightens his narrative with some amusing touches about adventures on leave and visits to the inevitable Bright Spots. Many a young lady with an airman for a sweetheart would do worse than to memorise the excellent advice which Beryl gives to Judy on page seventy-nine.

The author is to be congratulated on making what, after all, is a documentary account (containing a mass of detailed technical material, for the collection of which he was given every facility by the Air Ministry) both readable, exhilarating and exciting. As, one by one, the boys go into action the narrative takes on the urge of brilliant first-hand reporting. The description, for instance, of Henry Ireland's flight over Venice lacks nothing in breath-taking brilliance, even to the laconic sentence which tells of their safe return: "Dawn broke dully as they landed in mist at Mantelsham."

Here is a book which I venture to predict will be one of the really big sellers of the war. Already, I understand, it is in great demand in R.A.F. messes, and by young men who are hopeful of following in the footsteps of the seven young men who figure so largely within the pages of this book.

Miss Margaret Ferguson, whose novels are known to a wide and appreciative public, tells the story of her early life from childhood to the age of eighteen in BID TIME RETURN (Robert Hale. 12s. 6d.). These years she lived mainly in the East, in Persia, with occasional journeys to India and Iraq, and with, of course, intermittent visits to England.

Sir Frederick O'Connor in a foreword recalls her as a shy and rather "bookish" child in pigtails, devoted to her parents and her home at Shiraz, and living in a world of dreams and fancies of her own. These delightful reminiscences confirm this picture, but they also produce a most attractive background of a country which, in those days, was not the enlightened and progressive place it is now. The crackle of rifle fire by night was a familiar sound to a child living in the heart of a country to whom all communication with the outside world was made by caravan journeys over bandit-infested mountains and deserts. Small wonder that the child grew up in a world of fantasy with which these things had a definite relationship.

Then came the war—that other war—which brought trouble, separation and danger to the family, and in which there was adventure in plenty with the restless and hostile tribes who were being aided and abetted by German agents. This book has a charming atmosphere of its own, principally because Miss Ferguson really does contrive to recall the social life of Persia, India and Iraq, and the adventures she and her family endured, through the mind of an imaginative and impressionable child.

Mrs. Sarah Gertrude Millin knows the South African scene better than most writers, and in her new novel, THE HERR WITCH DOCTOR (Heinemann. 7s. 6d.), she places her story against a background of Nazi manœuvres, propaganda and intrigue in that country. Barrie Lindsell went out as a missionary in 1921. He is the descendant of the first white missionary in the neighbouring Hottentot country who, to prove that all men were equal before God, had married a native. Barrie, therefore, was susceptible to the call of blood.

Very soon he falls in with a young African who dreams of a Continent united under the black man and in which the white man has no place. Into the swift-moving story there come Nazi propagandists, themselves disguised as missionaries, who preach the foul gospel of Nazi-ism. With this and with their degenerate African accomplices the missionary wages his fight.

It is a novel written with considerable power and insight into political forces using every form of corruption to gain their end. It is also written with a deep pity and understanding of racial problems. It is also very exciting. In a word, this is one of the best books which this competent novelist has given us in her distinguished career.

In a lighter vein, we turn to a charming piece of nonsense in the form of ARNOLD IN AFRICA, by R. O. Hennings (Methuen. 8s.). Arnold Ark inherited the ancestral nose, about which he was justly sensitive. Anybody attacking that nose, whether by accident or design, was for it.

Unfortunately, the Italian Ambassador got mixed up in a fracas over Arnold's nose, with results that brought about an international incident, which assumed such proportions that Arnold looked like having to be sacrificed in order that the peace of Europe should be preserved. There was nothing for it but that Arnold should do a bunk. He bunked off to Africa, as the title implies. A lot of things happen before he is finally reprieved and the incident comfortably regarded as closed. It is a fast-moving story on broad lines of comedy. Real escape stuff, in fact, and stuff which I personally enjoyed every word of.

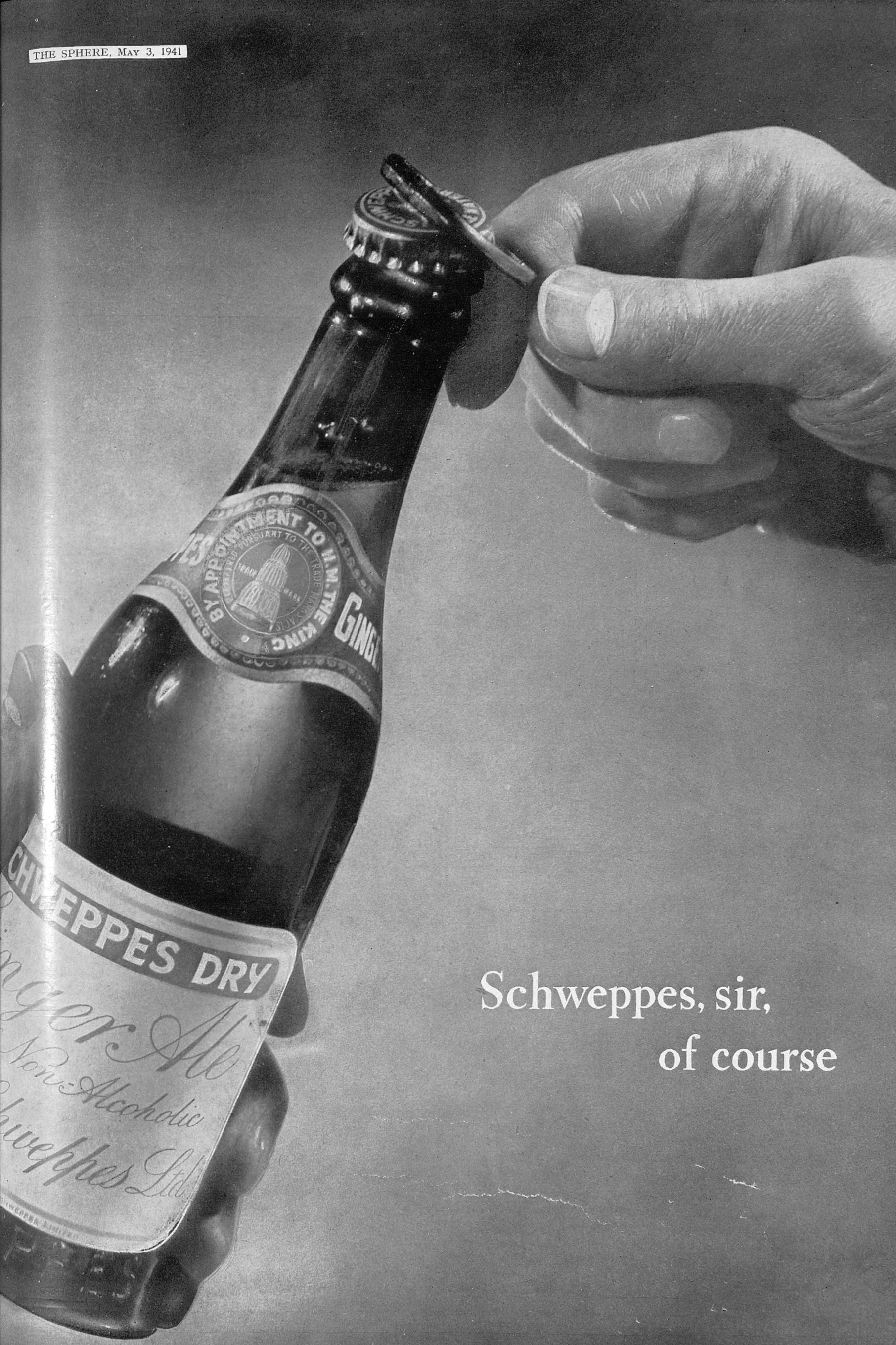
Nor is it possible to resist Mr. Peter Cheyney, when he reintroduces his inimitable Lemmy Caution, "with a flock of dames that would have made Casanova blink." YOUR DEAL, MY LOVELY (Collins. 7s. 6d.) is Lemmy Caution in full measure, while the dames leave nothing at all to be desired. Mr. Cheyney is as tough, slick, fast-moving and funny as ever, though I, for one, have not yet been able to get round to his synthetic slang.

As we began with the air, I might finish by drawing your attention to BIRTH OF A SPITFIRE (Collins. 3s. 6d.). Mr. Gordon Beckles is another able journalist; his story of how Lord Beaverbrook created a new Ministry of Aircraft Production almost overnight, and then proceeded to the creation of Spitfire Funds, is an enthralling piece of descriptive reporting.

The World of Books—By Vernon Fane

THE BLENDING OF FACT AND FICTION

Charles Graves' Story of the R.A.F.; Margaret Ferguson's Childhood Reminiscences; A Powerful South African Novel, and Two in Lighter Vein



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In Quest of Good Hotels

By ASHLEY COURTENAY

THE LAMBS, like all thoughtless children, were inclined to wander from their anxious mothers, and as Nicky and I came into sight, on our pre-breakfast stroll, there was much bleating and heart beating. Yet there was no cause for fear, for Nicky, a Sealyham with sheep-dog strain, is the perfect gentleman where sheep are concerned, and has only one interest in outdoor life, rabbit holes . . . and their occupants.

Fear knocks at every door sometimes, yet when we come to analyse our thoughts, the shadows are so much greater than the reality; and so if you have occasion to stay in London, after weeks of quiet country nights, you need have no real fear for your comparative safety . . . or your comfort.

Four and a half hours after leaving the palpitating sheep we steamed into Paddington, dead on time, and as I drove through Hyde Park I saw hundreds of other sheep complacently grazing, unconscious of war, devoid of fear.

It is all a matter of adjusting one's mentality to environment, and Londoners and the Hyde Park sheep have long since learnt to take no notice of sirens, guns . . . or maybe bombs.

I drove to Brown's Hotel, which faces the ill-fated Bath Club in Dover Street, and has another main entrance in Albemarle Street. I doubt whether one could select an hotel more dignified in its demeanour, so selective in its clientele, and where one could feel so fearless.

I know nothing of the history of Brown's, but without being over modernised, it has kept abreast with the times. My bedroom, decorated in a restful shade of green, had modern comforts readily to hand. A telephone by the bedside, plenty of lights in the right places, built-in cupboards; and though there was no central heating in my room, there was a coal fire only awaiting a match, if need be.

To provide extra assurance for the timid, Brown's have recently had constructed a bomb-, blast-, gas- and flood-proof shelter with bunks and chairs. But it would have to be an unusually heavy Blitz to drive occupiers of such comfortable bedrooms below stairs. As yet it has been unoccupied.

In the morning I breakfasted in their panelled dining-room, and over an English breakfast reflected on the essential rightness of the surrounds. Staffordshire china, silver plate and even the marmalade wore a ducal air.

On leaving I noticed a barometer in the hall which carried a notice to the effect that it was set each morning at 9 o'clock, a reminder that there were once days at Brown's, as there will be again, when the weather, not the war, will be our primary conversation. Meanwhile, through war clouds or rainstorm, Brown's, London, carries on. Is there any other hotel quite so typically British?

It was whilst I was down in Somerset that I received an invitation to visit a Charles the First house which has in the last few months been opened as a distinctive Guest House. It lies under twenty miles from London, in leafy Hertfordshire, and is so well situated that I was advised that one could forget the possibility of air raids at Bury Green House, near Cheshunt. So on leaving Brown's Hotel I telephoned Waltham Cross 2334 for travel direction.

To say that Bury Green House has proved to be my "find" of the year would not be an over-statement. It surprised me, both in relationship to location and excellence. Taking a Hertford Green Line 'bus from Cavendish Square (they run at the hour, the twenty-past and the twenty-to) I alighted in exactly one hour at the Old Pond, Cheshunt, where a car awaited me, and in a bare five minutes a manservant had opened the front door at Bury Green House, and I was being shown up to my bedroom, a truly palatial one, with its balconies, French windows and a French bed, which I am not likely to forget, because of its comfort and size.

From the windows cows were browsing, portents of cream on the milk with my early-morning cup of tea. Yet the morning brought another surprise. Some pigeons hopped in at the French windows, cooed "good morning," or something to that effect, then hopped out.

I should imagine that former owners of Bury Green House used to stay at Brown's when they came to town, for there was that same sense of rightness in everything that I had enjoyed the night previously in Dover Street. Yet there was this difference: Bury Green House is furnished as a home. It breathes ease and elegance, and under its present ownership the best possible use has been made of the spacious and charming rooms.

Perfect "cuisine" and "service" is a tall order in these war days, but so far as it is humanly possible it will continue to be found at this period guest house.

So for me, then, it will be Brown's when I need to spend the occasional night or so in London itself, and Bury Green House if I came back to work in town, and wanted to live outside the gates.

But perhaps I am wrong to publicise the fact, for there are only seven letting bedrooms at Bury Green House, of which only three are single. The prices are 5½ guineas a week single, and from 4 guineas a week double, and very inclusive they are.

Superfluous energy can be worked off in the 9 acres of grounds, which include a hard tennis court. And behind is the country, as far as the eye can see, and not a house in sight.

ANSWERS TO CORRESPONDENTS

C. T. (Purley).—I am afraid you will have difficulty in getting accommodation in or around Sandy, in Bedfordshire, but make a note of The Anchor at Tempsford, for even if they have no room now it is a place worth noting down for the future. It's alongside the river, and there is an admirable bathing pool when such summer delights come in again.

D. W. W. (Beckenham).—Trust Houses have an hotel at Ross-on-Wye called the Swan and a smaller one called the King's Head. If you are thinking of Symonds Yat you should go to the Royal, which has during the last year come under new ownership. As far as I know, Sedbury Park, near Chepstow, is still open, and in conjunction with the hotel they run a Guest House called Meads.

Mr. Ashley Courtenay is always pleased to advise "Sphere" readers of hotels, both large and small, known to him personally. Letters, accompanied by a 2½d. stamp for reply, should be addressed to him, c/o the Editor, THE SPHERE, Commonwealth House, 1, New Oxford Street, London, W.C.1. Personal and telephone inquiries, however, cannot be accepted.

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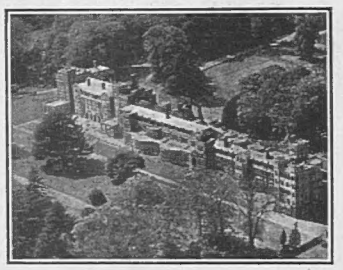

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PRINTED IN ENGLAND by THE ILLUSTRATED LONDON NEWS AND SKETCH, LTD., Milford Lane, London, W.C.2, and Published Weekly by ILLUSTRATED NEWSPAPERS, LTD., Commonwealth House, 1, New Oxford Street, London, W.C.1. SATURDAY, MAY 3, 1941. Entered as Second-Class Matter at the New York (N.Y.) Post Office, 1903.